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The Google conundrum: Perpetrator or facilitator on the net? — Forging a fair copyright framework of rights, liability and responsibility in response to search engine 2.0 — Part I: The Google Images Search Engine

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ABSTRACT

Is Google in its quest for search engine optimization through the creation of new technologies, which not only improves its search algorithms but also refines its search functions for users, doing it in a manner that makes it a perpetrator of primary copyright infringement or an invaluable facilitator for Internet functionality? How should the balance of interests in the treatment of creative works be recalibrated in the face of changes in search engine technology and operations, and the disputes that have arisen within the last decade in the context of the digital age and its needs? Using Google as a case study, this paper will look at the two main areas of dispute over the operations of information locator tools and services that either threatens search engine functionality and efficiency or weakens copyright holders' exclusive rights. It proposes a concerted set of solutions through a reassessment and amendment of copyright law to optimize the social benefits and objectives of both the copyright regime and technological innovations in the electronic model of information archiving, indexing and delivery. A fair distribution of responsibilities and allocation of rights and liabilities will be suggested. In the process, due consideration will be given to both public and private interests, with the former taking precedence; while the recommended solutions will be made within the currently outdated framework for Internet intermediary protection (i.e. safe harbor laws) and exceptions (i.e. specific statutory exemptions and the general fair use defense) under the existing copyright regime. Thus, the proposed changes will be far reaching without being too radical a departure from current law, an evolution that will likely be more acceptable and realistic a solution to the problem.

This paper is published in two parts. Part One of this paper will deal with the challenges to the copyright regime posed by the operations and technology behind the Google Images Search Engine, while Part Two that will be published in the subsequent edition of the CLSR will assess the benefits of the Google Books Search Project vis-à-vis the effects it will have on the scope of copyright protection. Recommendations are made to copyright law to accommodate both functions while generally preserving the main objectives of copyright protection.

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1. General introduction: the expansion of search engine functions and legal impediments

1.1. Introduction: the clone wars between Google and the creative empire

It is trite to say that the law lags behind technology but never is it more apparent than in the case of copyright law with respect to the rapid development of information technology. Although there have been amendments and changes to the law to reconcile the public and private interests involved in copyright law to accommodate significant developments in digital technology, these legal reforms have only been partially successful in resolving the differences between them and in keeping disputes outside of the judicial arena. Safe harbor laws or limitation of liability laws for Internet intermediaries were enacted at a time when technology was simpler and their functions less varied. They have largely remained unchanged despite the rapid changes in the role and function of such intermediaries in relation to the technologies that they use. Fundamental copyright laws including the types of exclusive rights protected and the exceptions to infringement of such rights, in particular the fair use doctrine, were also crafted further back in time before information technology even existed. Although they are still useful in the modern context and there have been some general amendments made to safeguard the core Internet functionalities from infringement, these are not comprehensive enough, as evidenced by the increasing volume of disputes over time. Similarly, cases interpreting such provisions have been trying to apply them, and in some cases update the laws, to keep them in line with technological progress; but with each step in judicial activism to supplement the current statutory law, such as the development and application of secondary infringement and fair use tests, new changes soon take place that still render the existing laws inadequate to the needs of the Internet.

In relation to search engines, the development from a single basic model to a multi-faceted one presents unique challenges to copyright policy and law. Google initially started as a general search engine and largely dealt with information in all forms within a single Web search. This was because most of the earlier types of materials uploaded onto the WWW were in the form of literary information, limited by bandwidth in speed and volume as well as in availability by level of usage and digitization of format. As things changed and the types of work began to encompass all forms of creative works, the search engines' functions also expanded and became more nuanced and sophisticated. Searches for different types of work were differentiated, and more significantly, the manner of the storage-catalog-display-access process became different for each form of work. Google's technological changes to its business model were both driven by market demand and advancements in Internet usage and WWW accessibility as a whole.¹

¹ The latest innovation by Google is the Google Instant Previews, which is another way to make Google search results even more user-friendly. See e.g., J.R. Raphael, *Google Instant Previews: A Hands-On Tour* (PC World, 10 November, 2010), available at: http://www.pcworld.com/article/210198/google_instant_previews_a_handson_tour.html.

Matters are further complicated as Internet entities are not easily categorized according to their objectives and operations. For example, Google Videos (and now Google TV), Google Music, Finance, Shopping, Maps and Blogs are presented as new specialized search engines dedicated to various forms and manifestations of creative works or user services. Google's diversification of its business portfolio to search-related functions also adds to the issues. For example, while its subsidiary YouTube operates also as a music and video search engine, it additionally provides audio-visual storage and streaming as well as advertising facilities. The Google Books Search engine (like Google News and Scholar) further categorizes information according to form but in a technically different and controversial manner, with Google functioning as an archiver, indexer and middleman linking the reader or buyer to authors or booksellers. In the process, Google also caches some online content and render them available to its users even after the original website copy is taken down. The Google Images Search function allows the search for photos and pictures available online separate from the context of the literary works and audio-video images that it may relate to, as thumbnails and screen captures respectively. It also provides users with the option of accessing the full-size image either in the website hosting that image or in a different browser. Table 1 presents an overview of the different legal implications of Google's search engines for different types of works and their possible outcome under current law.²

The case studies in this paper will make clear that Google currently functions based on an opt-out model of copyright law, which is an inversion of the way that copyright law operates today.³ It fundamentally conflicts with the existing framework of the copyright regime, which requires an opting-in to private relinquishment of rights by the rights holders themselves. Google justifies its activities in relation to copyrighted works as a necessity; that is, in the preparations for or performance of its functions, it operates on the basis that it has a legitimate basis to usurp and perform one or more exclusive rights that copyright law traditionally reserves to copyright owners, which generally requires their prior release or transfer to a third party through private arrangements. The model adopted determines the balance of initial rights, and

² An action for infringement taken by a copyright holder against an Internet intermediary like Google normally involves a three-step approach under the current copyright regime: The rights implicated; the potential safe harbors, the type of infringement and statutory defenses. The latter two are distinct although some of their legal requirements, and relevant factual evidence or proof, do overlap; in particular, the elements of knowledge and intention as well as the action and activities concerned.

³ See e.g., Jennifer Suzanne Bresson Bisk, *Book Search Is Beautiful?: An Analysis of Whether Google Book Search Violates International Copyright Law*, 17 Alb. L.J. Sci. & Tech. 271, 275–280 (2007), on the confines of the international copyright consensus under which Google can operate its 'opt-out' regime, especially Article 9(2) of the Berne Convention and the limitations that require exceptions that do not conflict with the normal exploitation of the work or unreasonably prejudice the legitimate interests of the creator.

Table 1 – The increasing specificity, complexity and diversification of search functions based on the type of creative works.

Stages of Copyright Action ²	Literary	Image	Audio-Visual
Rights Implicated	Storage ^a (and caching) Copying Display	Copying Adaptation (thumbnails) Display (inc. in-lining)	Storage ^a Copying Adaptation (screen capturing) Display Broadcast
Possible Actions in Infringement	Primary	Primary	Primary (Music/TV) Secondary (YouTube)
Safe Harbor Protection	No	No	No (Music/TV) Maybe (YouTube)
Fair Use Defense	Maybe	Likely/Yes (transformative use)	Likely/Yes (Music/TV) (transformative use) Maybe (YouTube) (substantial non-infringing uses; non-inducement)
Private Arrangements	Likely/Yes (settlement agreements in progress)	Not Applicable	Yes (special agreements with some media outlets)

a This practice may be relevant to an inquiry into the likelihood of common law secondary infringement.

underlies the power struggle between the two sides. Because copyright law automatically and by default grants rights to authors or publishers, it is therefore the case that disputes over rights and liabilities over this fundamental issue would originate from the copyright owner as plaintiff and places search engines functioning like Google largely on the defensive insofar as a court litigation is concerned. Google does not have the legal standing to take any pre-emptive steps to justify the legality of its operations, but it is reactionary in the sense that only if and when action is threatened or a case is brought against it can seek a judgment that would legitimize its activities, either on the basis of statutory protection or exemption or both. This creates an atmosphere of uncertainty for technology creators and copyright owners alike.

In order to more easily identify where the issues lie with a view to a comprehensive solution to these problems, Google's role and operations *vis-a-vis* the various forms of works in its search engines will have to be separately scrutinized. This is because the law addresses not so much the form that a legal entity takes but rather its objectives and functions; that is, its level of knowledge and forms of practices respectively. On the matter of statutory protections, Google will be judged as an "information locator tool" generally on the basis of its level of control over third party material and potentially primary infringing activities as well as whether it operates as a first party infringer itself. The legitimacy of its control and involvement in any online activity by a third party is the key element for its eligibility to existing statutory immunity or otherwise. On the issue of its defenses, Google will be judged based on its own actions and the form of infringing activity in relation to the type of work concerned against the existing statutory exemptions under copyright law, in particular the general fair use exception. Important considerations here, other than the existing fair use factors, include the social benefits and 'disbenefits' of its actions to society, whether and to what extent it is integral to its primary function as a search engine, the 'value-add' of the function, the alternatives available, the technological limitations to infringement and the potential benefits and detriment to copyright holders.

1.2. The clone wars⁴

Google Inc. primarily deals as an Internet intermediary between third parties, serving as a gateway or reference for one (the User) and as a platform for outreach for the other (the Poster), irrespective of whether it is specifically between a business and consumer (B2C) or generally between other types of content providers and Internet users. It essentially handles content and creative works in various ways such as its storage, indexing and transfer. Thus, its main antagonists are the authorities in terms of the regulation of content in general, and intellectual property rights holders in relation to the treatment of creative works. The former seeks control over content for political and socio-cultural regulation, while the latter seeks protection of proprietary content and related moral rights and financial interests.

Google began innocuously enough as an indexing and information locator tool pledged to "do no evil". However, for its survival and continued relevance as a technological pioneer and to maintain its advantage as market leader in its field of operation, Google Inc. has strategically taken a multi-pronged approach to its evolution. Google began to do several things in the new millennium: First it expanded its operations trans-nationally for a global reach; second, Google also diversified its roles, functions and capacity in relation to and revolving around its core function as an information location service; and third, in order to fund its operations and also to fulfill its mandate or duties as a corporate entity, Google also started and acquired businesses that are related or complementary to its search engine operations including compatible

⁴ The term "copyright" can be misleading as the rights pertaining to it involve much more than mere duplication or copying (referred to here as "cloning"), and this may account for the perpetuation of a lack of understanding and a general acceptance amongst laymen of practices including music sampling and technological innovations like image in-lining that may technically infringe other exclusive rights under copyright law.

Table 2 – Table of comparison on Google’s role in relation to some of its search functions.

Search Function	Poster	Google’s Role	Copyright Holders’ Options
Text/News Search Music Search (US only)	Copyright Holder Third Party	News: Google Aggregator Services	Opt-Out Notice Process ^a Settlement Option
Book Search	Google	Books: Scanning and Storage	Opt-Out Settlement option
Image Search	Copyright holder Third Party	Images: Thumbnails, framing and in-lining images only	Opt-Out Notice process ^a
Music/Video Search YouTube	Copyright Holder Third Party	Videos: Screen-Capturing and Various Forms of Recommendations	Opt-Out Notice Process ^a Settlement Option
a Statutory notice-and-take-down process (the notice process).			

technology companies.⁵ All these developments have grown the company into a highly lucrative force and have inevitably given rise to envy and rivalry among its competitors, and to disputes with the creative industries whose intellectual property it increasingly ‘transacts’ in rather than merely ‘manages’.

In relation to the second objective, Google has taken on a more active, some would even say aggressive, role in its efforts to produce the best search results for its keyword search services, in terms of comprehensiveness, relevancy and accuracy, for each of its suite of purpose- and format-based search engines. For instance, in relation to the Google Books Search Project (GBS), Google has gone beyond merely “spidering” and cataloging of materials posted by third parties to taking active steps to scan hard copies of literary works, storing them and posting them in various forms and levels of substantiality. Similarly, in order for the effective and efficient functioning of the Google Images Search Engine (GIS) and its Google Video Search Engine (GVS), Google reduces the size of images appearing on web pages and video stills to thumbnail sized images and screen captures respectively for search results display. In relation to the former, it further provides a framed in-lined full sized image on the browser window (either in a frame or superimposed over a faded background of the original webpage), giving users the option of accessing and viewing the image in or out of its original context. Thus, there are some distinctions across Google’s search services in terms of its practices and policies, which is apparent from simple categorizations like the one in Table 2.

1.3. The creative empire strikes back

One would have thought that as a cataloger providing indexing function to organize data on the WWW so as to connect users to copyright holders’ materials, it would endear Google to both parties and create a symbiotic relationship between

them. To a large extent, the parties still enjoy a positive relationship amongst themselves, but conflicts began to arise and cracks started to form in their relationship as Google’s expansion of its operations began to encroach on the traditionally conservative rights of copyright holders, and as their interests began to diverge and conflict. This tension that exists between creative works and technology, and between creators’ rights and technological progress, both of which are beneficial to society as a whole, has been heightened over time.⁶ It is thus inevitable that Google’s *expansionist* ambitions would clash with the *protectionist* tendencies of creators the more it gets involved in the copying, adaptation and publication of creative works in such a manner that can amount to secondary and even primary infringement. In each of the search functions that Google has launched and operates today, there have been disputes with copyright holders that feel that their rights are threatened. This is really part of the overall distrust that copyright owners hold toward information and communications technology in general and the digitization of communication, products and services in particular; and the fear of a concomitant loss of control over how their works are used. Thus, there are a series of cases before the courts in many jurisdictions between copyright owners as plaintiffs against Google as a defendant over its practices.

2. The objectives of this paper: the search for a compromise

The focus of this article is on the legal challenges that Google faces in two main areas of its operations relating to the

⁵ The “successful monetization of search” or “consumptive use”, the interest of content creators in profit sharing and the distribution of such services as well as the “increasing breadth of services offered” by the search engine industry would inevitably lead to a greater volume of disputes. See, Ben Kociubinski, *Copyright and the Evolving Law of Internet Search – Field v. Google, Inc. and Perfect 10 v. Google, Inc.*, 12 B.U. J. Sci. & Tech. L. 372, 383–4 (Summer 2006). Google is also selling advertisement space on its search engine display as its primary form of business.

⁶ An example of the complex relationship between the two sides is the ongoing copyright litigation between Viacom and YouTube, a Google subsidiary. Viacom has used YouTube as a marketing tool to reach potential consumers while it complains that the same tool is *abused* by both Google (as intermediary) and consumers (as users). This uneasy relationship is further complicated by the fact that the parties require one another to survive and perhaps even thrive even while they are in conflict over the parameters of copyright protection and Internet intermediary protection. In the long term, both sides cannot afford to totally win or alienate one another with their objectives and functions. This makes the job of the mediator (i.e. policy and law-makers) more difficult as a result and the obvious outcome is some sort of compromise.

expansion of its search engine functions, with a special focus on the technological tools that it had developed and is currently using to improve its information location services. In Section I of this Part, I will examine the US cases on the practices and features relating to the effective functioning of image search engines. In particular the cases by a photographer against Arriba Soft Corp. (now Ditto.com) and an adult men's magazine featuring pictures of women against Google (and Amazon) provides the initial assessment of the legality of the technologies and features of image search engines and the likely trends and attitudes of the US courts and the courts of other jurisdictions in their application of the law, in particular the analysis of the fair use defense raised by the defendants. In Part Two of this paper, I will examine the features of the Google Books Search Project that sets it apart from Google's other information search services (i.e. News, Finance, Scholar and Blogs). The analyses of the issues surrounding these operations, the existing state of law and how it has applied to these functions, and the likely trends of judicial decision-making or statutory amendment, will be done before a proposal will be made on the appropriate reallocation of rights, liability and responsibility to recalibrate the balance of interests underlying copyright law.⁷ This will be done in Section II of the respective Parts of this article.

In Section II of this Part, I will recommend solutions for the issues relating to the Google Images Search Engine through a suggested set of legal reform within the existing Internet intermediaries' law and copyright framework in relation to Google's functions, in a manner that will likewise be applicable to similar functions offered by other Internet intermediaries. Measures for Google to change or improve its practices in order to seek reconciliation through compromise with copyright owners will also be suggested.⁸

These changes in the law and recommended practices can also be useful for other similar disputes relating to Google's myriad roles and functions in relation to its search services and beyond. The proposed legislative amendments,⁹ and the various forms and levels that it can take, as determined by the importance of the function concerned, can help to resolve the

outstanding issues for Google and also for other Internet intermediaries including search engines, and technology companies that offer, create and develop the same or similar services.¹⁰ In the process, the overarching public policy considerations will also be determined, and Google's 'menu' of search functions will be assessed as to their importance and contributions to social good as well as the challenges that they pose to the protection of copyright holders' interests and copyright law objectives.¹¹

The proposed reforms will involve the following:¹²

1. Updating the safe harbor provisions to specifically address and allow for specific roles, functions, operations and technological tools relating to the search engine where the overall benefits outweigh the detriment; in particular, where the social benefits are great and the financial impact on copyright holders is minimal. Rather than as a *right* to protection, alternatively the same or similar provisions can take the form of specific fair use exemptions as a *defense* that will have to be pleaded by the defendant.
2. Updating the non-exhaustive list of fair use factors with new and additional factors that take into account the important differences in treatment that should be accorded to copyrightable works in the digital context arising from and illustrated by the case studies in Parts One and Two; including the suggestion to statutorily recognize and codify judge-made tests such as the "transformative use test", the "substantial non-infringing uses test" and the "non-inducement test" that emerged from United States Supreme Court decisions. Transparency through the release of explanatory notes and transcripts of preparatory works will serve as useful guidelines on the policies behind the amendments

⁷ As a proviso, it must be stated at the outset that the focus of existing and likely state of affairs between the law and Google's functions will be on US copyright law and Google's operations in the US. It should also be noted that Google may offer different sets of services in different jurisdictions based on the country-coded top level domain name (ccTLD) search engine webpage or the generic top level domain name (gTLD) search engine webpage; thus services such as its Books and Music search engines are not available in all jurisdictions, while others such as Web, Images and Videos search engines are largely available.

⁸ Although private resolution can be an alternative method of achieving agreement, it cannot be a satisfactory vehicle for achieving consensus, as law and policy makers must also ensure that public interests are not ignored or given short shrift and that there should be harmonization in treatment vertically (to the same types of parties) and horizontally (across jurisdictions).

⁹ Another function that this exercise will achieve is the recommendation of these factors to other jurisdictions and for it to be brought before international trade and intellectual property bodies, in particular the World Intellectual Property Organization (WIPO) with a view to achieving worldwide coherence, and harmonized advancement, in copyright law.

¹⁰ It must be kept in mind that despite the fact that Google and its activities vis-à-vis the law is the subject of this paper, the real focus is on its functions and purposes and that is where the legal and policy reforms has to be made. Also, it must be noted that although Google is the main protagonist and subject of this analysis, much of the analysis here are equally applicable to Google's main competitors such as Yahoo! and other online enterprises or non-profit organizations that have taken on the same roles or are performing the same functions and operations as Google. In other words, the recommendations are subject neutral and apply to any Internet intermediary based on the facts and circumstances of the case. Hence, some of the solutions that will be proposed in this paper will be familiar and can relate and apply where applicable to other disputes such as those between copyright holders and other technology creators.

¹¹ I.e. optimization of societal benefits for public interest analysis over and above a rights-liability and benefits-detriment private interest analysis. The technical and practical benefits of Google's search functions are measured against the main objectives of copyright law.

¹² As noted before, the suggested legal reforms through statutory amendments could also apply beyond domestic jurisdictions to international copyright or trade-related treaties, through such world bodies like the World Trade Organization (WTO) or the WIPO. At the very least, it is hoped that this paper will provide consideration for courts and generate academic discussion on the potential legal solutions to the issues as well as provide some guidance for Google and other search engines providing similar services on the strength of their legal position as well as how they can tailor their activities to place themselves in more favorable legal footing.

and for the proper application of these factors, including their relationship with secondary infringement actions, which can also be extended to other new technologies.

3. Section I – the Google Images Search Engine (GIS)

3.1. Brief history of development

Like many Internet intermediaries operating on the WWW today, Google operates as a conduit between online entities. Its advertising business model is supplementary to, but reliant on, its basic function as a search engine. Google indexes materials in all forms for the benefit of Internet users while it sells advertising space and services on its web pages on a non-mutually exclusive basis. It is also at the forefront of the user-generated content movement, having acquired YouTube and other similar businesses through the diversification of its portfolio. Google began its function as an information locator service indexing online materials irrespective of their nature and form, mainly dealing with and presenting them in the same way. The benefit of this function, which was not controversial in its inception, was the basis for the copyright 'safe harbor' provisions under the domestic law in most countries. As search engines like Google expand its functionality based on efficiency and efficacy, it is perhaps inevitable that it will compartmentalize its searches and offer specific services based on the nature of a work and the type of material that a user is searching for. This is user customization – to improve the accuracy of relevant search returns and consequently the overall customer experience. The aim is to both retain and expand its user-customer base. Over time, as both its locator tool and its search algorithms became more sophisticated, specific and targeted, disputes began to arise; and one of the earliest specific form of search launched and that gave rise to copyright dispute was the images search engine.

Image search indexes pre-date Google's images search engine. It involves the use of a form of technology that crawls, indexes, and caches websites on servers to enable quick access. Upon the entry of keywords and the push of a button, likely relevant information and images that may be of interest to the user will be presented based on search algorithms. It is important to note at the outset that it is logical that image search results will be presented as images and not merely descriptively through words or phrases, which is key to the objections and disputes that arose relating to the images search function services. Google's images search service creates and provides thumbnail or reduced-sized copies of images that are search by user who may see them on a results page. When a user selects an image from a Google search, a new page is accessed that includes a faded image of the original website in the background of the full-sized image superimposed before it as well as Google's right frame that contains information about the image including the domain name of the website wherein it is found, and links to the full-sized image in a separate browser and to the website containing the image in its full context. Clicking on the superimposed image or full-sized image link will produce a webpage containing only the full-sized image as it appears

on the source page, while clicking on the domain name or the faded background will bring the user to the website proper.¹³

This form of gathering and cataloging of online information is 'content-neutral' and 'source indifferent'. This is important to note as they involve issues of control and complicity that relates to immunity and culpability respectively. For instance, the websites crawled and presented includes many third-party websites that contains copyright infringing images.

3.1.1. The opt-out feature

The opt-out feature is in full effect here and will be the common thread throughout all the search functions relating to different forms of content. The automatic process involved in producing searchable images is based on an automatic and presumptive opt-in of all images available on the WWW. Image owners can opt-out by demanding that images uploaded without their permission be taken down by giving notice through the statutory notice process.

3.2. The issues

The first significant case addressing the legality of image searches utilizing modified and extracted copies of images uploaded by third parties did not involve Google but rather an early images search engine known as Arriba Soft Corp. (now Ditto.com), but it is nevertheless instructive for all search engines including Google on the legal status of such a service. In fact, it was that case that first expanded the fair use factor defense to the online context. Before going into the substance of the seminal cases, it will be useful to first identify the issues and the main practices in contention, as the result of the cases as well as the proposed solution will depend on the type of use in question.

3.2.1. First issue: the production and display of thumbnail or reduced-sized images for search results – likely fair use

A 'thumbnail' is a reduced-size version of a full-sized image that allows users to quickly find visual information on a search engine and allows more images to be presented in a results page for a streamlined and a quicker and easier selection process. Google has modified the images search results page since the cases, but the basic format, presentations and functions remain the same. Currently, thumbnail images pops-out and the thumbnail images on a particular subject are presented in scroll-down form in a single search results page. The format for other search engines such as Yahoo! remains closer to the original Google architecture.

It is to be noted that the main difference with information search is that, unlike the use of part of online information

¹³ Google's Images Search Results interface is not consistent. In some cases, it only displays the image against a white background with a row of images responding to the similar keyword search displayed under it and with a right bar containing information on and hyperlink to the image. However, the manner of display is largely substantively similar and gives rise to the same issues. Previously, Google produces image results in a top frame with the relevant information on the image and links, with the actual website shown under that frame. It is to be noted that Google does place a warning that "[the] Image may be subject to copyright" with every search result.

without changes in its presentation, computer modifications or adaptations are made to the entire image in the process of streamlining the image search results process so as to better present or display it for selection from a single page (i.e. more search results on one page). However, these dissimilarities may not so different if looked at from a different perspective, for one can also consider the excerpting of results from information websites as a form of adaptation of a work; it is even more similar if the caching function, which has been adjudged to be legal in *Field v. Google, Inc.*,¹⁴ is taken into consideration. Be that as it may, the mere modification of image content removes it from the statutory safe harbor as will be explained below and hence the legality of its creation and use remains the subject of a fair use analysis.

3.2.2. Second issue: inline linking to full-sized images in a separate browser window – unresolved

Google's images search engine also provides an intermediate view between the results page and the actual webpage. It currently operates in substantially similar form from its original top frame to the current right frame format. This page frames the original webpage and provides a further choice for users to visit a browser window containing only the image, or to go to the image in context, that is the original webpage that can be a main page or an inner page through a process known as deep-linking. Originally, as part of the process by which it provides results to image searchers, Google presented a top framed page containing the thumbnail, information and domain name hyperlink, the larger bottom half of which shows part of the third party website on which the image is found. In one of the more current designs, the click-on images search results presents an interim or holding page with the full-sized image superimposed over a faded background of the original webpage, as opposed to presenting a thumbnail in the frame itself, with a right frame containing the usual information and links relating to the image.

An inline link essentially pulls materials such as an image from the original website onto the webpage viewed. Technically, it remains on the original website and is not copied,¹⁵ but practically it appears otherwise and there can be confusion or ignorance of origin by the average user.

¹⁴ In *Field v. Google, Inc.*, 412 F. Supp. 2d 1106 (D. Nev. 2006), the plaintiff, Field, argued that the defendant Google infringed his exclusive right to reproduce his copyrighted works when it cached his website and made a copy of it available on its search engine. Google raised multiple defenses including the doctrines of implied license, fair use and estoppel as well as eligibility for statutory protection under the United States' Online Copyright Infringement Liability Limitation Act (OCILLA) safe harbor provisions in the Digital Millennium Copyright Act (DMCA). The court found in favor of the defendant and granted the motion for summary judgment in Google's favor.

¹⁵ Google does not store or physically transmit the full images, only the thumbnails. However, it provides a holding page with information on the source of the image and the option to visit the image in its context on the webpage or the extract of the full image itself in a separate browser window. This will become the basis for a divergence in tests used by the United States Circuit Courts to determine Google's liability - the "server test" and the "incorporation test".

3.2.3. Third issue: linking to third party websites containing and using images that infringes another's copyright – likely safe harbor

The specter of secondary liability was also brought up in relation to linking to infringing websites through the images that are contained therein. This was an additional cause of action that was brought into play in the *Perfect 10* case to be analyzed below, but which remains unresolved by the courts. However, an assessment can be made of the likelihood of success on either the vicarious or contributory bases of action as well as the applicable reach of the safe harbor immunity under the United States' Digital Millennium Copyright Act (DMCA),¹⁶ given that it does concern the search engine as an Internet intermediary, dealing with third party material. It will also be assessed as to whether and to what extent the immunity should apply and what internal checks and balances such as the notice process that should be implemented by Google and the form that it should take.

3.3. Safe harbor and the DMCA

The DMCA defines an Online Service Provider (OSP) as "a provider of online services or network access, or the operator of facilities therefor,"¹⁷ which can be interpreted expansively to encompass services hosting or distributing third-party content. Eligibility for safe harbor hinges on the fulfillment of two conditions or threshold requirements – namely that the OSP: "(A) has adopted and reasonably implemented, and informs subscribers and account holders of the service provider's system or network of, a policy that provides for the termination in appropriate circumstances of subscribers and account holders of the service provider's system or network who are repeat infringers; and (B) accommodates and does not interfere with standard technical measures".¹⁸

The DMCA provides four safe harbor categories that can shield a provider from liability for copyright infringement. They are categorized based on function and are for "transitory digital network communications", "system caching", "information residing on systems or networks at the direction of users", and "information location tools".¹⁹ Before the safe harbor protections are required, the plaintiff copyright owner

¹⁶ 17 U.S.C. §512.

¹⁷ 17 U.S.C. §512(k)(1)(B). Courts have found that an OSP's capacity to terminate user accounts or disable access to infringing material does not disqualify the OSP from safe harbor under §512(c)(1)(B). See, e.g., *Hendrickson v. eBay, Inc.*, 165 F. Supp. 2d 1082, 1094 (C.D. Cal. 2001) (stressing that OSPs do not lose safe harbor by engaging in voluntary practices to reduce infringing activity). See also, *Perfect 10, Inc. v. CCBill, LLC*, 2007 U.S. App. LEXIS 12508 (9th Cir.) (noting that reasonable implementation does not require an OSP to affirmatively police its users for evidence of repeat infringement).

¹⁸ 17 U.S.C. §512(i)(1)(A)(B). Methods used to identify and protect copyrighted materials.

¹⁹ 17 U.S.C. §512(a-d).

must give proper notice that the service provider in question is hosting infringing content.²⁰

The image search engine's re-creation and use of thumbnails as well as the framing, inline linking and deep linking for display removes it from the safety berth of section 512(a) as a "transitory digital network communications" service provider because the material is not transmitted without modification of content.²¹ Section 512(d) for service providers of "information location tools" only covers image search engines from secondary infringement liability for the act of referring or linking users to such materials online if all the pre-requisites are met; that is, there is no legal knowledge or awareness, no direct financial benefit and an adherence to the notice process.²² Hence the mere technical act of cataloging all content on the WWW irrespective of source and providing links between users and posters irrespective of the legitimacy or legality of the postings is protected and the third issue is

²⁰ 17 U.S.C. §512(c)(3). Whether or not Google and Amazon deserve these protections will depend on how strictly the court require the parties to comply with the technical definitions in the Act. See, Eric Carnevale, *Questions of Copyright in Google's Image Search: Developments in Perfect 10, Inc. v. Amazon.Com, Inc.*, 14 B.U. J. Sci. & Tech. L. 132, 141–142 (Winter 2008), on the potential applicability of the DMCA safe harbor provisions to Google and Amazon.

²¹ 17 U.S.C. § 512(a)(5).

²² 17 U.S.C. § 512(d).

²³ 336 F.3d 811 (9th Cir. 2003). To be known as "Kelly v. Arriba".

²⁴ The plaintiff Kelly sold pictures to various publications from his website. The defendants Arriba ran an image search engine that indexed pictures from the WWW for users to conduct image searches. The search engine reduces the size of images of all dimensions into thumbnail sized images that matches the keyword term. Kelly's pictures appeared as thumbnails on the defendants' search engine along with millions of other thumbnail images from all over the WWW. Clicking on the thumbnails from Kelly's website would connect the user to the webpage in Kelly's website containing the image, but bypasses the home page (i.e. deep linking). Just like how Google functions, the user who clicks on a thumbnail is brought to an intermediate framed page where he is also given the option of going to only the full image in a new web browser window as well as in the context of the original webpage. The thumbnail image was stored on Arriba's servers whereas the full image was not replicated. Kelly sued Arriba for copyright infringement for both the re-creation and use of the thumbnail image and the full image. In a summary judgment, the lower court judge found for the search engine operator based on a finding of fair use (77 F. Supp. 2d 1116 (C.D. Cal. 1999)), a decision that was upheld on appeal, holding that thumbnails were *prima facie* infringing, but that the fair use doctrine permitted the use of the thumbnails by image search engines in an index and within their search results. However, the Circuit Court overturned the lower court's decision on the issue of inline linking to the full-sized images out of context, holding that fair use did not permit the inline linking or framing processes that displayed Kelly's images in the context of Arriba's website. On 7 July 2003, it modified its initial decision by letting the ruling on thumbnails stand but withdrawing its decision on inline links and remanded the case to the District Court for trial, holding that the lower had made a decision it should not have made at that stage of the proceedings. The Court of Appeals held that a search engine operator's use of images as thumbnails without seeking prior permission constituted fair use (280 F.3d 934 (CA9 2002)) withdrawn, re-filed at 336 F.3d 811 (CA9 2003). The issue of inline linking of full-sized images remained unresolved at this point.

likely to be resolved at this stage. Because of the nature of the first two issues, which relates to Google's own actions in relation to images, the safe harbor protection does not apply and it has to seek respite under current exceptions or exemptions from primary infringement.

3.4. Fair use and the cases

3.4.1. Kelly v. Arriba Soft Corporation²³

Kelly v. Arriba is often cited as the authority relating to the legality of the functions of image search engines in relation to third party images. In this case, the Ninth Circuit held that the re-creation and use of thumbnails of copyrighted images that are made available on the WWW by third parties, whether or not copyright holders or licensees, by an image search engine to be presented in its results page and triggered by a keyword search, constituted fair use.²⁴

According to the court, while these thumbnail images also serve an Aesthetic purpose, their use by search engines for presentation in an image search results page was "transformative" in the context of the first fair use factor,²⁵ which thereby affected the treatment and weight of the other factors as well.²⁶ It was transformative in this context as its use improved users' access to images on the Internet. This application of the transformative use test is an expansion of its original formulation by the US Supreme Court in *Campbell v. Acuff-Rose*.²⁷ The fair use test is likely to be successful if a 'transformed work' leads to a socially productive outcome and different or value-added function from the original.

In summary on the thumbnail issue, the Ninth Circuit found in favor of Arriba based on the following assessment and weight of the four main factors in the fair use analysis, which overall weighed in favor of the defendant:

1. Purpose and character of the use – The use was found to be transformative albeit commercial in that it was not of the

²⁵ Kelly v. Arriba Soft Corp., 336 F.3d 811 (9th Cir. 2003) at 818. The "purpose and character of the use", which considers the social value of the secondary usage, taking into consideration whether the use is commercial or for a non-profit educational purpose, and whether there is mere duplication or involves some modification (i.e. transformation) imbuing the work with new meaning, message or expression. See, 17 U.S.C. §107.

²⁶ Although the commercial aspect of the defendant's use will weigh against a finding of fair use, whereas a finding of non-profit and educational purpose tends to support a claim for fair use, neither is conclusive or precludes a finding otherwise and a lot depends on the cumulative effect and weight of all the relevant factors.

²⁷ Luther R. Campbell AKA Luke Skywalker v. Acuff-Rose Music, 510 US 569 (1994). To be known as "Campbell v. Acuff-Rose". In this case, the US Supreme Court held that while transformative use is not essential for a finding of fair use, the purpose of copyright is advanced by the use of transformative works. The Court stated that: "Such works thus lie at the heart of the fair use doctrine's guarantee of breathing space within the confines of copyright." Furthermore, the more transformative the new work, the less significant are the other factors (as they are neither mutually exclusive nor exhaustive) in terms of relevance and weight, such as the market effect for the copyrighted work (*ibid.* at 579).

same type as the original work, because the images were not being sold as pictures but were to facilitate the presentation and identification of images by the search engine. Thus, the first factor weighed in Arriba's favor due to the public benefit of the image search engine and the minimal loss of integrity to Kelly's images.

2. Nature of the copyrighted work – The pictures were creative work published and made available on the WWW. A creative work favors a finding of infringement, although as a publicly accessible published work, the use was more likely to be fair. As such, this factor weighed only slightly in favor of Kelly.
3. Amount and substantiality of portion used – Copying an entire work generally militates against a finding of fair use; however, it was necessary for Arriba to copy the entire image to allow users to recognize the image and decide whether to pursue more information from source. The court therefore found this factor to be neutral in this context.
4. Effect of the use upon the potential market for or value of the copyrighted work – Once again, the effects of the transformative doctrine infected the court's assessment of a fair use factor. Here, it was found that a transformative work was less likely to have an adverse effect than one that merely supersedes the original. Also, Arriba's use of Kelly's images in its thumbnails did not harm the market for Kelly's images or the value of his images as they would direct traffic to Kelly's website and work rather than away from it and the size of the thumbnails made using them in lieu of

²⁸ On Arriba's use of inline linking and framing, the Ninth Circuit originally held that *prima facie*, this constituted a violation of Kelly's right to public display. The Ninth Circuit also considered whether Arriba could avail itself of the fair use defense, and held that it could not. Thus, Arriba was liable for directly infringing Kelly's copyright by inline linking and framing to the full-sized images. On the initial ruling (*Kelly I*), which went against Arriba, see Matthew C. Staples, *Kelly v. Arriba Soft Corp.*, 18 *Berkeley Tech. L. J.* 69, 77–79 (2003). Assessing Arriba's inline linking and framing practices, the court noted that Arriba had made no copies and hence did not infringement Kelly's duplication rights, it thus analyzed the case based on the public display right (*ibid.* at 78). Unlike the thumbnail images, the search engine could function the same (and arguable even better) without the framing and inlining of full-sized images as they were not necessary as a means to access other information on the WWW beyond what the thumbnails already provide (i.e. no new expression or meaning for "transformative use") but were an end product themselves (*ibid.* at 79). All four statutory fair use factors thus weighed in favor of Kelly and the court held that Arriba's inline linking and framing of Kelly's full-sized images did not constitute fair use. The Ninth Circuit subsequently issued a revised ruling (*Kelly II*), in which it withdrew the portion of the opinion dealing with inline linking and the public display right of the full-sized images over a year after the *Kelly I* decision was issued. This was due to procedural reasons, on the ground that the court should not have decided on this issue since the parties did not move for summary judgment as to copyright infringement of the full-sized images. In *Kelly II*, the court affirmed that Arriba's use of Kelly's images as thumbnails was a fair use. The court in *Kelly II* declined to address whether inline linking and framing of the full-sized images constituted direct infringement. Secondary infringement issues were not discussed in the *Kelly v. Arriba* litigation. Subsequently, in the *Perfect 10* case, the Ninth Circuit again revisited the matter and decided that inline linking to images did not infringe the public display right of image copyright holders.

the original image less likely among his target clientele. This factor thus weighed in favor of the defendant.

After some confusing about-turns on the issue of framing and inline linking and whether it constitutes copyright infringement of the public display right for search engines to utilize those techniques for its operations,²⁸ the matter remained unresolved at this stage.²⁹ As this technique of operation is commonly used by many other Internet search engines, including major players like Google, Yahoo!, Lycos, and Alta-vista, a conclusion otherwise can affect the facilitative uses of these applications and techniques for the efficient navigation of the WWW. The Ninth Circuit later revisited the question of whether inline linking infringes the public display right in the *Perfect 10* case, to be analyzed below, involving Google's images search function, where the court ultimately determined that inline linking to images without prior expressed approval does not violate the public display right under copyright law.

3.4.2. *Perfect 10 v. Google and Perfect 10 v. Amazon*³⁰

It would seem that the arguments in the *Kelly v. Arriba* case would apply favorably to Google in the subsequent case brought against itself and Amazon by *Perfect 10* on the same functions and within the same Circuit.³¹ However, although the transformative use test was accepted as applicable, the identity and specific use of the image by the poster and the potential market value in thumbnail images for *Perfect 10*, unlike the case for Kelly in the earlier case, shows how the application of the same fair use doctrine could give rise to a different reading and weighing of the factors to tip the balance in favor of a finding against fair use and copyright infringement. Indeed, the initial district court decision in this case illustrates how this fact-based approach of the fair use

²⁹ See further, Adam B. Olson, *Why Kelly v. Arriba Soft Corp.*, 336 *F.3d* 811 (9th Cir. 2003), *Does and Doesn't Matter*, 44 *Jurimetrics J.* 487 (Summer 2004). Neither party had requested summary judgment regarding Arriba's use of Kelly's full-size images nor had Kelly conceded it as a "display" and hence a *prima facie* case of copyright infringement. The court remanded the case to the district court for further proceedings consistent with the substituted opinion. As noted previously, the substitute opinion negated the appellate court's initial ruling that Arriba's use of Kelly's full-sized images infringed Kelly's copyrights.

³⁰ To be known collectively as the "*Perfect 10* case".

³¹ This line of cases must be put in context as being of precedential value only in the Ninth Circuit although it does have persuasive effect elsewhere in the United States and even in other countries.

assessment can give rise to conflicting cases and expectations of images search engine practices. In the district court decision in *Perfect 10 v. Google*,³² Google was sued for direct infringement for framing websites that contained Perfect 10's images without its authority and for Google's modification and re-creation of its images as thumbnails.³³ The plaintiff also sued for secondary infringement for framing infringing websites, but was not able to prove all the elements of contributory or vicarious infringement.³⁴

On the thumbnail practice, the four factors were again applied by the district court to the facts but in a manner that diverged in results from *Kelly v. Arriba* and raised a cause for concern to images search engine operators. It found for the plaintiff based on the following assessment:

1. Purpose and character of the use – The use was found to be commercial and partially transformative; that is, it was intended to serve a fundamentally different purpose than the original. The court found Google's use highly commercial, more so than in *Kelly v. Arriba*, due mainly to Google's AdSense program, which a number of the infringing sites used. Also, in contrast to the earlier case, the court noted that Perfect 10 also has a commercial interest in the use of thumbnail images as it leased the right to distribute reduced-size versions of its images for use on cell phones to another company, Fonestarz Media Limited, thereby putting it in direct competition with

Google's thumbnails. Therefore, the court ruled that this factor weighed slightly in favor of the plaintiff.

2. Nature of the copyrighted work – Creative works are given more protection against fair use than factual works, and unpublished works more than published works. The court rejected Google's argument that the images were not creative, but it acknowledged that the works were all published, and as such it ruled that this factor also weighed in favor of Perfect 10 but only slightly.
3. Amount and substantiality of portion used – Comparing the substantiality of the use to Google's need to use reduce-sized versions of entire images to serve its purpose of allowing identification, which it could not do as effectively if it had to crop images, this factor was weighed in favor of neither party.
4. Effect of the use upon the potential market for or value of the copyrighted work – As noted above, the plaintiff had begun marketing images for cell phones of comparable quality to Google's images. Thus, the court ruled that Google's infringement meant that this could greatly hurt Perfect 10's market and the value of its work when it could be downloaded and copied for free from Google's version. Thus this factor weighed against Google.

As a result, on the fair use issue, the court determined that cumulatively, the first, second, and fourth fair use factors weigh slightly in favor of the plaintiff while the third remained neutral. All things considered, the court concluded that Google's actions vis-à-vis Perfect 10's images did not fall within the fair use exception and awarded Perfect 10 injunctive relief against Google's use of its thumbnail. The Court reached this conclusion despite the enormous benefits that search engines such as Google provide,³⁵ and how this uncertainty in results could affect images search format and operations in general.

The *Perfect 10* case illustrates how the factors test could be applied differentially to diverse fact situations and circumstances, especially when significance is placed on the identity, practices and purpose of the copyright holder of images.³⁶

³² *Perfect 10, Inc. v. Google Inc.*, 416 F. Supp. 2d 828 (C.D. Cal. 2006). The district court granted the request in part and denied it in part, ruling that the thumbnails were likely to be found infringing but the links were not. See, Ben Kociubinski, *Copyright and the Evolving Law of Internet Search – Field v. Google, Inc. and Perfect 10 v. Google, Inc.*, 12 B.U.J. Sci. & Tech. L. 372 (Summer 2006), where the writer wrote of the implications of the *Field v. Google* and *Perfect 10* cases and also noted that another district court in Pennsylvania involving the issue of caching and indexing copyrighted material in the WWW has since followed *Field v. Google* and granted summary judgment to Google (*ibid.* at 383).

³³ The case involved a dispute between an adult men's magazine as plaintiff and Google as defendant. The plaintiff requested a preliminary injunction for Google to stop it from creating and distributing its thumbnail images in, and to stop indexing and linking to sites illegally hosting, such images on Google's image search service. Perfect 10 sold a men's magazine that featured sexually provocative images of women and also operated a website featuring such images and a business of leasing some of these images to other businesses. It filed a case against Google making various copyright and trademark infringement claims, including primary or direct infringement and secondary (contributory and vicarious) infringement of copyright. After failed settlement talks, the case proceeded to court. Following the district court's decision, both sides cross-appealed to the Ninth Circuit, which reversed the lower court decision.

³⁴ Google did not secondarily infringe on Perfect 10's rights as the infringing websites were independently existing irrespective of Google's framing practices even if it may have obtained direct financial benefits from advertising revenue tied to the framing practice. On this cause of action with respect to the issue of hyperlinks, Google also raised the safe harbor defense that Perfect 10 contested. However, the court did not reach an opinion on the matter as it found that Perfect 10 was unlikely to succeed on the matters of contributory and vicarious liability because of other arguments.

³⁵ Although the Court was reluctant to issue a ruling that it felt would impede the advance of Internet technology and the public benefits it provides, it felt that it could not allow such considerations to trump a reasoned analysis of the four fair use factors. This shows the importance of and priority that should be accorded to the expressed list of factors despite the flexibility of allotting weight and that they are non-exhaustive.

³⁶ See also, Adam B. Olson, *Why Kelly v. Arriba Soft Corp.*, 336 F.3d 811 (9th Cir. 2003), *Does and Doesn't Matter*, 44 *Jurimetrics J.* 487 (Summer 2004), where writer pointed out that the court's lack of clarity regarding the scope of its holding makes it difficult to determine the bounds of fair use as applied to the creation and use of thumbnails. If narrowly construed a thumbnail is a fair use only if the original image is an esthetic work and it is used solely for indexing purposes; but if broadly construed, all thumbnails may be considered fair uses because they are transformations of the original images.

This could have severe implications on image search engines that are fully automated in all cases, and that do not distinguish based on source, objectives and the profile of image uploaders. To require such screening and pre-judgment of WWW images will be a highly onerous and burdensome process for search service providers.

In relation to the framing issue, the district court found that the relevant question of whether Google was guilty of displaying and distributing the full-sized images due to its framing of third party content was whether it hosted and physically transmitted the content itself (the “server test”).³⁷ It rejected Perfect 10’s argument that the relevant question should be whether the content is visually incorporated into the site (the “incorporation test”).³⁸ Since on the physical level, Google only provided an instruction for the user’s computer to fetch the infringing pages from servers not under its control, the court found that Perfect 10 was unlikely to succeed on this point, and so denied its request for an injunction.³⁹

However, the district court’s decision that the Google images search’s thumbnail practice was infringing was

overturned by the Ninth Circuit,⁴⁰ which ruled on a balance of interests that its use was “highly transformative,”⁴¹ because Google transformed the images from a use of entertainment and artistic expression to one of facilitating the retrieval of information including images from the Internet.⁴² The court thus raised the bar for unfair use of images as thumbnails in

³⁷ The court gave several reasons for its adoption of the “server test”, *inter alia*, that the test is consistent with how content travels over the Internet. The court also reasoned that the test is liability “neutral”, meaning that the test does not invite infringing activities by search engines, but search engines may still be liable for secondary infringement (i.e. contributory or vicarious liability). Also, the court was of the view that the “server test” would maintain the delicate balance which copyright law strives, which is to promote the creation of creative works and encourage the dissemination of information. Most importantly, the court was reluctant to adopt the “incorporation test” as it “would cause a tremendous chilling effect on the core functionality of the web – its capacity to link, a vital feature of the internet that makes it accessible, creative and valuable.” See, Nimmer on Copyright § 12B. 01[A][2] (2005) cited by *Perfect 10 v. Google Inc.* 416 F. Supp. 2d 828 (C.D. Cal. 2006) at 840.

³⁸ This may have an impact on the question of whether a framed work or composition of websites is a derivative work, which was first broached in *Futuredonics Inc. v. Applied Anagramics, Inc.*, et al., 45 U.S.P.Q.2d. (BNA) 2005. See, Hillel I. Parness, *Framing the Question: How Does Kelly v. Arriba Soft Advance the Framing Debate?*, Vol. 7, No. 1 p. 9 (Cyberspace Lawyer, March 2002), noting that arguing framing as infringement of the right to create an adaptation may not be logical, practicable or even necessary when other exclusive rights such as reproduction or display could be used instead.

³⁹ Google was not found liable for secondary infringement, either contributory or vicarious. In light of this, the district court thought it unnecessary to deal the issues regarding safe harbor immunity under the DMCA.

⁴⁰ In 2007, the Ninth Circuit made three decisions based on Perfect 10’s lawsuit on the basis of copyright infringement against various Internet intermediaries in its bid to stop alleged unauthorized downloading of its images from the WWW. First was *Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1154 (9th Cir. 2007), which was a consolidated case against both Google and Amazon involving Perfect 10’s request for a preliminary injunction that Google directly and indirectly infringed its copyrights by thumbnailing its images and facilitating its display on users’ computer screens, and providing access to full sized versions of the infringing images drawn from the original website within its frames (*ibid.* at 1155–57). Second, in *Perfect 10 v. Visa International Service Ass’n*, 494 F.3d 788 (9th Cir. 2007), Perfect 10 argued that financial institutions that process credit card payments to websites that allegedly profited by selling unauthorized copies of its copyrighted images had committed contributory and vicarious infringement of its copyright infringement (*ibid.* at 793). Third, in *Perfect 10 v. CCBill Inc.*, 488 F.3d 1102 (9th Cir. 2007), Perfect 10 sought to impose liability for, among other things, the defendant’s provision of web hosting and related Internet connectivity services to the owners of infringing websites. The Ninth Circuit dealt with aspects of the safe harbor and notice provisions contained in the DMCA in this decision (*ibid.* at 1102). See, Robert A. McFarlane, *The Ninth Circuit Lands a “Perfect 10” Applying Copyright Law to the Internet*, 38 Golden Gate U.L. Rev. 381 (Spring 2008), for an introduction to the trifecta of cases. See also, Ryan M. Rodenberg, Bryan V. Swatt and Pamela C. Laucella, *Perfect 10 v. Visa, Mastercard, et al.: A Full Frontal Assault on Copyright Enforcement in Digital Media or a Slippery Slope Diverted?*, 8 Chi.-Kent J. Intell. Prop. 85 (Fall 2008); James M. Tilly, *Perfect 10 v. Visa: The Future of Contributory Copyright Infringement*, 61 Okla. L. Rev. 865 (Winter 2008) and David Haskel, *A Good Value Chain Gone Bad: Indirect Copyright Liability in Perfect 10 v. Visa*, 23 Berkeley Tech. L.J. 405 (2008), for criticisms on the case as against the interests of copyright holders. For an archive of materials on the case, see the Electronic Frontiers Foundation website at: <http://www EFF.org/cases/perfect-10-v-google>.

⁴¹ *Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1154 (9th Cir. 2007) at 1165. “We conclude that the significantly transformative nature of Google’s search engine, particularly in light of its public benefit, outweighs Google’s superseding and commercial uses of the thumbnails in this case.” (*ibid.* at 1166). In reversing the district court’s finding that Google’s thumbnails supersedes Perfect 10’s area of business in licensing the sale of smaller size images, the Ninth Circuit opined that since the district court did not make a finding that Google users have downloaded thumbnail images for cell phone use, the potential harm to Perfect 10’s market was merely hypothetical, while the transformative nature of Google’s use was more significant than any incidental superseding use or the minor commercial aspects of Google’s search engine and website.

⁴² Citing *Kelly v. Arriba*. As content on the WWW continues to expand, this argument on the importance of cataloging and the sensitivity and accuracy of relevant information retrieval devices and technologies can only become even more compelling over time.

search engines,⁴³ although it did not rule the possibility out totally in circumstances that may render a reading of the tea leaves of fair use factors in favor of the copyright holder. But given the facts of this decision, it will be quite difficult to determine what could be the case.⁴⁴ The Federal Court of Appeal in this case rendered the cases more consistent once again within the Ninth Circuit.⁴⁵ However, the lower court decision, and the fact that the weight of the fair use factors were fact-based and varied according to different fact circumstances, although finally determinatively resolved by the transformative use test, nonetheless illustrates the dangers of potential judicial divergence in future United States court decisions as well as the application of the fair use test or its equivalent and in other jurisdictions that may not adopt the same approach to the matter.⁴⁶

As noted, “transformative use” as a doctrine also has a significant impact on the factors test and analysis and it can, often adversely, impact on the weight of the other factors transcending its role in the first factor analysis. The stronger the

“transformative effect as determined by the court, the less significant the other factors relative to it.”⁴⁷ It permeates and ‘infects’ all the other factors in the analysis and thus seems to supplant them in importance.⁴⁸ This makes the factors assessment even more flexible, which also means that it is more subjective. It also makes the adoption of the test integral to the survival of the image search engine function in other jurisdictions.

Although the lower court’s decision was reversed and superseded by a subsequent opinion by the Federal Court of Appeal that is more consistent with *Kelly v. Arriba*,⁴⁹ the potential for differential treatment and confusion remains as the issue have only been dealt with in the Ninth Circuit and have yet to be considered in other Circuit Courts, and there is no authoritative pronouncement by the United States Supreme Court on whether the transformative use test is

⁴³ “Future courts are likely to overvalue the transformative nature of search engines and undervalue the legitimate rights of the copyright holder. When analyzing fair use, the *Kelly* holding illustrates how courts may fail to consider any other factors beyond transformative use”. Sara Ayazi, *Search Engines Score Another Perfect 10: The Continued Misuse of Copyrighted Images on the Internet*, 7 N.C. J.L. & Tech. 367 (Spring 2006), criticizing the expansion and application of the transformative use test and endorsing the district court’s approach in the *Perfect 10* case as a clawback of the search engine’s privileges.

⁴⁴ Based on the Ninth Circuit’s reasoning, plaintiffs in the future may increase the strength of the superseding argument and downplay the transformative factor by providing actual evidence of superseding use.

⁴⁵ Robert A. McFarlane, *The Ninth Circuit Lands a “Perfect 10” Applying Copyright Law to the Internet*, 38 Golden Gate U.L. Rev. 381 (Spring 2008), on the *Perfect 10* trilogy of cases. In particular, it noted that *Perfect 10 v. Amazon* narrowed liability for direct infringement by determining that there was no unauthorized copying in inline linking based on the “server test” and from thumbnail of images through the fair use defense or for indirect infringement as there was no control for vicarious infringement to occur and only specific knowledge and failure to take simple preventative measures would give rise to contributory infringement (*ibid.* at 404–5).

⁴⁶ In the *Perfect 10* case, the Ninth Circuit court acknowledged the “case-specific analysis of fair use”, albeit “in light of the purposes of copyright”. See, *Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1154 (9th Cir. 2007) at 1165–6.

⁴⁷ E.g. *vis-à-vis* commercialism. “We note the importance of analyzing fair use flexibly in light of new circumstances. *Sony Corporation of America et al. v. Universal City Studios, Inc., et al.*, 464 U.S. 417 (1984) at 431–32; *ibid.* at 448 n. 31 (“[Section 107] endorses the purpose and general scope of the judicial doctrine of fair use, but there is no disposition to freeze the doctrine in the statute, especially during a period of rapid technological change.”) (quoting H.R. Rep. No. 94-1476, pp. 65–66 (1976), U.S. Code Cong. & Admin. News 1976, p. 5680). We are also mindful of the Supreme Court’s direction that “the more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use.” *Campbell v. Acuff-Rose*, 510 U.S. at 579.” (*ibid.* at 1166). Also, consider its relationship *vis-à-vis* substantiality of use in this context.

⁴⁸ Transformative use started gaining popularity after the landmark decision in *Campbell v. Acuff-Rose*. In essence, transformation, or purposeful use of an original work, adding value to the existing work in creating something new, was the *sine qua non* of fair use”. See, Matthew D. Bunker, *Eroding Fair Use: The “Transformative” Use Doctrine After Campbell*, 7 Comm. L. & Pol’y 1, 6 (2002). However, the Supreme Court in *Campbell v. Acuff-Rose* fell short of providing lower courts a fully developed structure of analysis for later cases. This has resulted in inconsistencies in the application of the transformative doctrine. In particular, as suggested, courts in some cases tend to focus too much on the transformative factor, to the extent that it has almost become “proxy for the fair use determination itself” (*ibid.* at 24).

⁴⁹ *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146 (9th Cir. 2007), available at: <http://www.ca9.uscourts.gov/datastore/opinions/2007/12/03/0655405.pdf>. The Ninth Circuit reversed the district court’s decision on appeal on its fair use and contributory infringement findings and vacated the preliminary injunction regarding Google’s use of thumbnail images. On appeal, the Ninth Circuit dealt with the issues in relation to both Google and Amazon. Amazon was implicated as it gave users access and use in its site to Google search results, framed via inline links (by which the Amazon user received the same search result as the Google user). The suit was for both primary and secondary infringement. On 22 February 2010, it was reported that *Perfect 10* have settled the suit with Amazon but not with Google on the outstanding case on contributory copyright infringement. See, Edvard Pettersson, *Amazon.com, Perfect 10 Settle Suit Over Nude Pictures* (Bloomberg Businessweek, 22 February 2010), available at: <http://www.businessweek.com/news/2010-02-22/amazon-com-perfect-10-settle-suit-over-nude-pictures-update1-.html>. See also, the earlier (pre-amended) opinion, *Perfect 10, Inc. v. Amazon.com, Inc.*, 487 F.3d 701 (9th Cir 2007). *Perfect 10* has a track record of suing Internet intermediaries on several grounds rather than primary infringers. See, e.g., *Perfect 10, Inc. v. Visa Int’l Serv. Ass’n*, 494 F.3d 788 (9th Cir. 2007), where *Perfect 10* sued the financial institutions which process credit card payments to stolen-content websites. See further *SAIF v. Google France and Google Inc., TGI Paris* (20 May 2008), available at: www.legalis.net and Alain Strowel and Vicky Hanley, *Secondary liability for copyright infringement with regard to hyperlinks in Alain Strowel (ed.), Peer-To-Peer File Sharing and Secondary Liability in Copyright Law* (PEFC 2009) at 103–4, on a case similar to the *Perfect 10* case brought by a collective society (SAIF) representing well-known French photographers against Google before the French courts for the use of thumbnails and offering links to illicit reproductions of photographs through its image search engine. The case was similarly decided in favor of Google on the direct infringement issue relating to thumbnails; but it did not address the issue of indirect copyright liability for linking to illegal content.

applicable in this context or guidance on when and how images search engines are legitimate. There is also still the potential that a fact situation can give rise to a finding that there is lack of fair use when it comes to the current images search engine practices even if the possibility is remote.

On the second issue, the Ninth Circuit affirmed the district court's decision that Google's framing, hyper linking, inline linking and even deep linking practices as part of an images search engine service were not infringing acts. The entire search engine business model appears to have the same transformative effect.⁵⁰

Finally, the Ninth Circuit also reversed the district court's decision on secondary contributory infringement,⁵¹ holding that Google was potentially liable on a theory of contributory

infringement for infringing plaintiff's copyrights as a result of its provision of such inline links.⁵²

Some academics have argued that *Kelly v. Arriba* and subsequent cases have misapplied and over-extended the transformative use test via the first factor analysis.⁵³ This writer argues otherwise; that the transformative use test was useful, but because of the Pandora's box that can give rise to differences in its application, the formulation of a general legislative protection, specific exemption or at least clearer and more comprehensive fair use factors to render a consistent legal and factually-neutral application is the best solution. Google should not be required to screen or make initial assessments of the legitimacy of its source of images or to act in a pseudo-legal decision-making capacity at any stage of its operations. The outcome of the *Kelly v. Arriba* decision and the *Perfect 10* opinions seem to bear this out. Although the position, at least in the Ninth Circuit appears to be more consistent now, again it must be reiterated that the outcome is unclear for future cases, especially with such a fact-based analysis.

3.5. Other developments and issues

3.5.1. Google Videos Search Engine (GVS) and YouTube

A form of search that Google offers online as the materials on the WWW expanded beyond texts and still images, is the search for videos and, in the United States at least, music files. Google Videos is a free video search engine and sharing website.⁵⁴ It operates similar to YouTube in some of its functions such as allowing some videos to be embedded on other websites, making them appear as part of that website, by

⁵⁰ For the purpose of direct infringement, the Ninth Circuit endorsed the "server test" applied by the district court. Under this test, a party infringes the display rights of a copyright holder in an image when it stores a copy of that image on its own server, and delivers it to a third party. When an intermediate party merely provides a link to a third party website where such infringing material can be found, it is that third party website, and not the intermediary providing the link, that directly infringes the display rights of the copyright holder by causing that infringing image to be displayed on a user's computer screen. Applying this test, Google did not directly infringe by providing inline links to third party websites that themselves contained infringing images. This is a very technical application of the law and does not consider the spirit and effects of framing and in-linking or the real value of framing and inline linking to a picture out of context vis-à-vis the rights of copyright holders.

⁵¹ According to the Court, Google could be held contributorily liable if it had knowledge that infringing Perfect 10 copyrighted images were available using its search engine and could have but failed to take simple measures to prevent further damage to its works. Issues of fact as to the adequacy of notices sent by Perfect 10 alerting Google that it was in fact providing links to third party websites containing infringing images and Google's response and ability to remove such infringing websites from its search results were referred back to the District Court to resolve on remand. The district court was also tasked to consider whether the DMCA immunized Google from liability for such contributory infringement, an issue that it did not address earlier when it had wrongly determined that Google was not likely to be found liable for contributory infringement. However, the Ninth Circuit agreed that there was no likelihood of vicarious infringement due to a lack of control over independent third party infringement. See further, Jason Schultz, *P10 v. Google: Public Interest Prevails in Digital Copyright Showdown* (Electronic Frontier Foundation, 16 May 2007), available at: <http://www.eff.org/deeplinks/2007/05/p10-v-google-public-interest-prevails-digital-copyright-showdown>. A ruling in favor of Perfect 10 on this could have an adverse impact on how content hosts function such as file and video sharing websites that link to or host third-party content. On a critical analysis of the court's decision on secondary liability, see Anthony Falzone, *The Two Faces of Perfect 10 v. Google* (The Center for Internet and Society, Stanford Law School 16 May 2007), available at: <http://cyberlaw.stanford.edu/node/5409>.

⁵² See, David Haskel, *A Good Value Chain Gone Bad: Indirect Copyright Liability in Perfect 10 v. Visa*, 23 *Berkeley Tech. L.J.* 405, 414 (2008). The Ninth Circuit remanded for the district court to decide the questions whether Google had the requisite knowledge of primary infringement and failed to take adequately preventative steps to prevent further damage to Perfect 10 and also whether Google was protected under §512(d) of the DMCA safe harbor. See also, Eric Carnevale, *Questions of Copyright in Google's Image Search: Developments in Perfect 10, Inc. v. Amazon.Com, Inc.*, 14 *B.U. J. Sci. & Tech. L.* 132, (Winter 2008). "The Circuit Court left three issues to be decided on remand. First, based on a test enunciated by the Circuit Court, did Google have "knowledge that infringing Perfect 10 images were available using its search engine, and could [have taken] simple measures to prevent further damage to Perfect 10's copyrighted works, and [fail] to take such steps?" (729) Next, what is Amazon.com's potential contributory liability? (733) Lastly, can Google and Amazon.com limit their liability pursuant to Title II of the Digital Millennium Copyright Act (DMCA)? (733)." (*ibid.* at 141). On remand, the district court did not address the issue of Google's liability for contributory and vicarious infringement. However, it did grant in part, and deny in part, Google's motion for partial summary judgment of entitlement to safe harbor under §512(d) of the DMCA for its web and image searches.

⁵³ Sara Ayazi, *Search Engines Score Another Perfect 10: The Continued Misuse of Copyrighted Images on the Internet*, 7 *N.C. J.L. & Tech.* 367, 381–96 (2006).

⁵⁴ Google trawls the WWW to index videos from any genre and type including amateur videos, viral advertisements, movie trailers and music videos.

providing the HTML code with the video. The service was launched on 25 January 2005. A year later, in 2006, Google bought over YouTube,⁵⁵ and in 2007 Google expanded its search results on Google Videos search to videos discovered by their search crawlers from YouTube as well as other video hosting sites and user websites. The search results are similar to a combination of Google Web and Google Images. Google displays a list of videos matching the keyword search vertically with a heading that serves as a link, a two paragraph description and other information (i.e. uploader, length and date), a link to “related videos” as well as a screen capture of a frame of the video that also serves as a jump to the website hosting the video. Unlike for Google Images, there is no intermediate page with the Google frame on it. Thus a click on the link will bring the user directly to the source page with the video in its original context.

Interestingly, while it is now embroiled in the legal dispute as the parent company of YouTube for hosting illegal materials, in early 2009, Google discontinued its own hosting facilities for the uploading of videos to its own servers.⁵⁶ Thus Google Videos search remains distinct from YouTube’s practices, which accounts for the litigation against YouTube rather than both Google Videos and YouTube. Later that same year, Google announced its Google Music search engine for the United States market,⁵⁷ which became operational in 2010.⁵⁸ Google TV was also launched in 2010.⁵⁹

The outcome of the matter in relation to GIS has direct repercussions as well for the indexing functions of the GVS. The same issues relating to the use of thumbnail images for GIS will apply similarly to the thumbnail-sized screen captures of videos, although there is no problem with the display of full images out of context, since a one-step click-on process brings the user directly to the webpage hosting the video instead of an intermediate ‘holding’ page.

3.5.2. *Developments in other jurisdictions*

It is of interest to note that Google also recently concluded a copyright infringement lawsuit for the GIS in Germany brought before the German Federal Supreme Court (Bundesgerichtshof or “BGH”) by an artist, who had uploaded photos of her work to her own website, claiming that Google had infringed her copyrighted works by displaying thumbnail

images of her photos in its image search results.⁶⁰ Initially the lower courts ruled that the copyright had been infringed, but in a way that was justifiable. However, on appeal, the Federal Supreme Court ruled on 29 April 2010 that the use of the images was not copyright infringement in the first place because the artist had effectively consented to the use of the images. Search engines ‘crawl’ the web’s sites and make temporary copies of content to improve the performance of their search engines. Site owners can use ‘disallow’ commands in the website’s code to tell search engines not to index some or all of their pages or specific file types. Google’s crawling program, known as “Googlebot”, will ignore images if a site owner has used the ‘disallow’ command for images. The plaintiff had not explicitly authorized the use of her works but she had not blocked her website from being indexed by search engines which gave Google the implied license or permission it needed to use her images. As the ‘disallow’ command had not been used on the artist’s site, the Court ruled that she had effectively made her works available for Google to use. It remains to be seen if this liberal trend will take on in other jurisdictions or if they would prefer the more tentative approach in the United States. The case however illustrates that the issue is a global one and that there are strong policy arguments for preserving image search engine capabilities.

3.6. *Problems with current state of law*

The outcome of the current line of cases based on differences in facts and circumstances, and differences in the copyright holder’s profile including the purpose and use of the image, is untenable as it affects the neutrality of the search engine’s role and function in indexing and categorizing various forms of data or materials. It puts an element of risk in the equation and ostensibly require search engines to make judgment-based determinations in order to fully avoid civil liability. The lack of clarity in the law also creates uncertainty to the legality of operations and lead to differences of opinion and to disputes. In some cases, it has perpetuated industry-wide practices that go against the objectives of copyright law while in others it has given rise to needless threats and actions for legitimate and important functions. Clear laws and guidelines are thus needed. Current laws can affect and impede the function and utility of search engines for social good; while changes to the law can set fair and consistent standards for search engines to follow that will not affect its enhanced functionality.

The current state of the law in this matter for information locator services vis-à-vis copyright law is unsatisfactory for several reasons:

1. In relation to primary infringement for the re-creation of thumbnails for image identification and as an icon for hyper

⁵⁵ YouTube, LLC was bought by Google Inc. for US\$1.65 billion, and is now operated as a subsidiary of Google. In its expansion and diversification of operations and as part of its business strategy, Google have been acquiring online companies, and in particular the purchase of YouTube in October 2006 is noteworthy.

⁵⁶ Michael Cohen, *Turning Down Uploads at Google Video* (Official Google Video Blog, 14 January 2009), available at: <http://googlevideo.blogspot.com/2009/01/turning-down-uploads-at-google-video.html>.

⁵⁷ Caroline McCarthy, *Music Search is Google’s Newest Tune* (CNet News, 28 October 2004), available at: http://news.cnet.com/8301-1023_3-10385755-93.html. See also, Murali Viswanathan and Ganesh Ramanarayanan, *Making Search More Musical* (Official Google Blog, 28 October 2009), available at: <http://googleblog.blogspot.com/2009/10/making-search-more-musical.html>.

⁵⁸ See, Google Music Search Feature at: <http://www.google.com/landing/music/>.

⁵⁹ See, Google TV Search Feature at: <http://www.google.com/tv/>.

⁶⁰ File Number IZR 69/08. See, Dr. Amd Haller, Managing Counsel, Google Germany GmbH, *German Supreme Court Rules that Image Search Does Not Infringe Copyright* (Google European Public Policy Blog, 29 April 2007), available at: <http://googlepolicyeurope.blogspot.com/2010/04/german-supreme-court-rules-that-image.html>, for a reaction by Google Germany to the announcement of the decision.

linking to source – the cases on fair use appear to require search engines to screen the source or origin, use and purpose of images based on the identity of the copyright holder and to make judgment-based assessments based on the merits of each case *ab initio* to determine whether they can thumbnail images for search results based on a fair use assessment. This is something that should be avoided as it detracts from the efficient functionality of a search engine and again goes against the basic tenets of existing safe harbor laws for intermediaries, which is to function on a content-neutral and comprehensive basis.

2. In relation to the framing of websites and the in-lining of images not within the context of the source webpage – The United States case law and trend thus far appear to tolerate this practice. However, an assessment of its negative effects to the copyright holders weigh heavily against the lighter benefits it provides to users seeking only access to images, irrespective of the legality of their ‘use’, and its relevance and importance to the search function as a social benefit. Thus, a benefits-detriment analysis and interest balancing analysis will clearly favor this as an infringing practice, which should cease industry-wide.⁶¹
3. In relation to secondary infringement actions for use of third party images as thumbnails for identification and as hyperlinks, and the provision of links (including deep links) to the source website irrespective of legitimacy of source – the basis and reason that render it necessary for statutory safe harbor protection against third party posted content against civil liability generally applies likewise to copyright liability. There should be general copyright exemption or protection subject to the notice process for search engines providing links to third party websites that may or may not contain illegal images and other infringing materials. The notice process can sufficiently address the concerns of copyright owners in exchange for immunity.

3.7. Proposed solution under the law

In relation to the re-creation of images into thumbnails for presentation, identification and as a hyperlink icon to the source website, the opt-out model of operation should be made permissible,⁶² supplemented by the notice process that should satisfy the concerns of the copyright holders over third party websites that contains infringing images. An opt-out model means that there is a default right of inclusion of images through automated processes that trawls the WWW for cataloging, which is content and source neutral. Hence, the most suitable amendment in the law should be to include this exemption through an extension of the safe harbor protection or a specific

⁶¹ This does not mean that inline linking as a form of technology will become redundant as it could be permitted in other contexts and coupled with other practices or safeguards (such as attribution of source) to render it fairer for the use of such technologies. Another technology related to inline linking is embedding (such as video embedding provided by YouTube), which code is generally expressly given by the owner to encourage dissemination.

⁶² An implied license theory under contract law can also support this position. Generally, copyright holders making images available on public websites do gain an advantage in terms of exposure and traffic from the search engine’s functions.

statutory exemption from infringement.⁶³ If an opt-in or permission has to be sought from all image owners for image searching, that will cause the images search engine to be unfeasible for the provider and ineffectual for users. A combination of permissible performance of reasonable indexing functions supplemented by an option to opt-out, through a new “removal request process” that is akin to the notice process, but functions in relation to legitimate source and legal content, is a fair trade-off for both parties. This will be further explained in Section II.

In relation to the framing of websites and in-lining of images not within the context of the source webpage, there should be no changes in the law in favor of protecting these practices.⁶⁴ In fact, it will be recommended that this practice should not be allowed based on a balance of interests, benefits-detriment and fairness assessment.⁶⁵

Finally, in relation to its provision of hyperlinks to third party websites, what is reasonably required for Google and others like it to also avoid secondary infringement liability should be spelled out and clearly defined statutorily, including through the codification of the elements of secondary (i.e. contributory and vicarious) infringement, rather than left to the cases, which can make it a highly subjective exercise,

⁶³ However, the DMCA was clearly inapplicable to the first two issues in this paper, which relates to its own practices in relation to copyrighted works that may give rise to *primary* infringement liability. In relation to *secondary* infringement, Google moved for partial summary judgment in three separate motions that it was entitled to immunity under three different provisions of the DMCA: 17 U.S.C. §512(d) for its web and image searches, §512(b) for its caching feature and §512(c) for its blogger service. For the purpose of this paper, only §512(d) is relevant to Google’s images search function. The district court granted in part, and denied in part, Google’s motion for partial summary judgment of entitlement to safe harbor under §512(d).

⁶⁴ Although the *Perfect 10* case has loosened the knot around the neck of inline link users, it does not mean that other forms of technologies that serve the same function or purpose will also constitute fair use (at least not until judicially sanctioned as fair use). See e.g., Lee Burgunder and Barry Floyd, *The Future of Inline Web Design After Perfect 10*, 17 *Tex. Intell. Prop. L.J.* 1 (Fall 2008), striking a precautionary note and examining web design techniques in the light of that decision. In particular, they examined the existing potential for derivative rights violation depending on “the extent of any alterations, the degree of integration, potential economic effects, and the amount of control given to website visitors over the appearance of copyrighted content” (*ibid.* at 3). The writers also provided a non-exhaustive list of factors that will help such technology creators to assess the likelihood of their exposure to copyright infringement (*ibid.* at 47).

⁶⁵ There are also reasons for arguing against the “server test” as being too focused on the form of technology and inconsistent with the meaning of the copyright legislation. For example, see, Christopher Mitchell, *Implications of Perfect 10 and Kelly: Why the Ninth Circuit’s Server Test Misapplies Copyright Principles and How It Might Provide Loopholes for Direct Copyright Infringement* (The Selected Works of Christopher Mitchell, 2008), available at: http://works.bepress.com/christopher_mitchell/2, and Barry Floyd, *The Future of Inline Web Designing After Perfect 10* 17 *Tex. Intell. Prop. L.J.* 1 (2008–2009) at 16 and 20. See also, Lee Burgunder and Barry Floyd, *The Future of Inline Web Design After Perfect 10*, 17 *Tex. Intell. Prop. L.J.* 1 (Fall 2008) at 17.

giving rise to ambiguities in requirements or expectations.⁶⁶ For example, the Ninth Circuit in the *Perfect 10* case remanded the case to the district court for factual findings on the “reasonable and feasible means for Google to refrain from providing access to infringing images,”⁶⁷ that could give rise to contributory liability.⁶⁸ Reasonable response and adherence to the notice process should lead to immunity under the DMCA for third party material,⁶⁹ which immunizes service providers such as Google from liability for infringement of copyright by reason of the provider referring or linking users to an online location containing infringing material or infringing activity through using information location tools, including a directory, index, reference, pointer or hypertext link, if the service

⁶⁶ Damon Chetson, *Perfect 10 and Contributory Liability: Can Search Engines Survive?*, 9 N.C. J.L. & Tech. On. 1 (2007), examining the problems of applying the standard of contributory liability to search engines on the Internet and arguing that the court’s imputed liability test was not consistent with the US Supreme Court’s “fault-based” theory of inducement in *MGM Studios, Inc. v. Grokster, Ltd.* (545 U.S. 913 (2005)) or the substantial non-infringing use test in *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (*ibid.* at 11 and 14). See also, Anthony Falzone, *The Two Faces of Perfect 10 v. Google* (The Center for Internet and Society, Stanford Law School, 16 May 2007), available at: <http://cyberlaw.stanford.edu/node/5409>. “[The Ninth Circuit] held that Google could be held liable for providing search results that lead a user to a site with infringing content, so long as Google knew infringing content was available and could have done something “simple” to stop it.” The problem is that there is no clear guidance to search engines on what they must know and the level of knowledge, general or specific; as well as what constitutes the “simple” measures that they could take and the threshold of what is required, especially in the face of changing technology. See further, Meng Ding, *Perfect 10 v. Amazon.com: A Step Toward Copyright’s Tort Law Roots*, 23 Berkeley Tech. L.J. 373, 394–402 (2008), which sees the “simple measures” standard for search engines as equivalent to the “reasonable alternative design” approach to product liability cases under tort law (see, *Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1154 (9th Cir. 2007) at 1172). However, the writer also admitted the problems of uncertainty relating to such a test.

⁶⁷ See, *Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1154 (9th Cir. 2007) at 1173.

⁶⁸ This issue is not within the scope of objective of this paper and will be dealt with in the context of another article. Suffice it to note that as the technologies for hyper linking, framing, inline linking and embedding are integral to the workings of the WWW in general (and not merely to the functions of search engines) and they should be statutorily protected unless there are other extenuating facts and circumstances, other than mere usage, that should give rise to a finding of secondary infringement.

⁶⁹ The DMCA notice process places the burden of policing copyright infringement on the owners of the copyright. See, *Perfect 10 v. CCBill LLC*, 488 F.3d 1102 (9th Cir. 2007). The court also evaluated the requirements or threshold conditions for safe harbor, including the “reasonable implementation” of a policy to terminate its services to repeat and blatant infringers (17 U.S.C. §512(i)), which can function through a working notification system and other procedures (*ibid.* at 1109–10).

provider meets certain specified statutory criteria.⁷⁰ Similarly, the same “reasonableness” or “expeditiousness” test should form a part of the removal request process, where the power still ultimately resides in the copyright owner to control the use of his work provided he chooses to exercise it rather than enjoy such rights by default in relation to image search engine functions.

3.8. Private solutions: Google’s strategy, legal tactics and best practices

Search engine companies like Google could of course make private arrangements encouraging copyright holders to voluntarily relinquish their rights beyond those practices that are permitted by law. So, search engine operators should also provide an additional voluntary opt-in option. Another method is to tap into existing methods for copyright relinquishments such as the expressed and unsolicited permission from the copyright holder for adaptation or use through a creative commons license; through arrangements between the search engine and a group of rights holders such as an image bank, group of companies, members of an industry and so on; or through agreements to generally refrain from bringing an action on infringement against Google.⁷¹ The same arrangements can constitute an exception to the general prohibition from inline linking or framing in the holding page for an image selected. This is perhaps preferable to judicial activism through the use of implied license or other similar doctrines, which can constitute interference in what are essentially private issues that are more appropriate to be resolved contractually.

4. Section II – considerations and recommendations

The important assessment throughout this paper is to determine if Google as an Internet intermediary and its functions is a facilitator and hence should be protected or a perpetrator that should be sanctioned. The suggestion is to provide some level

⁷⁰ In the *Perfect 10* case, the only remaining basis for liability was on contributory infringement, which was remanded to the district court to determine through further fact finding because it did not earlier resolve factual disputes regarding the adequacy of *Perfect 10*’s notice of infringement to Google, the adequacy of Google’s responses to such notice, or the availability to Google of reasonable and feasible means to halt the direct infringement using its search engine. See, *Perfect 10 v. Amazon.com, Inc.*, 508 F.3d 1154 (9th Cir. 2007) at 1173. “Google could be held contributorily liable if it had knowledge that infringing *Perfect 10* images were available using its search engine, could take simple measures to prevent further damage to *Perfect 10*’s copyrighted works, and failed to take such steps” (*ibid.* at 1172).

⁷¹ E.g., not unlike the settlement in relation to the Google Books Search Project, except perhaps with less issues of remuneration as the likely profits attributable to in-linking, direct or indirect, are lower. Another consideration can be through the use of other forms of rights-protection technology that will deter or discourage misappropriation of images such as through the display of watermarked images or images actually made up of, and broken up into, several parts.

of protection for Google in its function as an image search engine while placing some responsibilities on it as conditions for it to be eligible for legal exemption from liability.

4.1. Fundamental policy considerations

When considering Google's proper role in society, it is necessary and inevitable to look at the public and private interests involved in its functions. Public interest considerations will include a benefit-detriment analysis of new versus traditional media and industries, the proliferation of digital information, the immediacy of news, the effects of e-commerce, the greater diversity of sources of narration and opinion, the rise of user-generated content (including citizen journalism), commercial and non-commercial interests, and other socio-economic factors. The role of Internet intermediaries in relation to these interests and the effects on copyright owners' interests are also fundamental.

4.2. Summary of approaches to law reform

The more drastic and fundamental changes will be to reform copyright law and protection generally to:

1. Require registration of copyright interest in order for eligibility of protection.⁷² This proposal fundamentally converts the entire copyright regime from one that enjoys protection by default and without the need for registration to one that requires an active assertion of rights.⁷³ A total overhaul can be problematic given the history of copyright law, the current body of national and international copyright

⁷² Hannibal Travis, *Building Universal Digital Libraries: An Agenda for Copyright Reform*, 33 Pepp. L. Rev. 761, 805–10 (2006). The writer also recommended denying copyrights to unoriginal reproductions of public domain works (*ibid.* at 810–4) and reversing what is seen as the “erosion of the fair use doctrine” (*ibid.* at 814–24).

⁷³ With the aid of technology, this may be done with ease and at low cost such as through the establishment of a computerized registry for opting-in to protection. Such a registry can be set up by WTO or WIPO with funding for research and development by international organizations, governments, Google and other interest parties.

⁷⁴ Although proponents advocate reforming copyright law to include a registration based system, this proposal will be difficult as such a move goes against the Berne Convention which did away with the need to register works before copyright protection is given. It will also face problems with European conceptions of copyright protection such as the French's recognition of a work as an extension of its author's personality. See, Pamela Samuelson, *Preliminary Thoughts on Copyright Reform*, Utah Law Review 551 (2007).

⁷⁵ Currently, fair use is still largely considered an affirmative defense. See, *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 578 (1994). This means that the user bears the burden of raising and proving non-infringement after a *prima facie* case of copyright infringement is made out based on the non-authorized usurpation of one of the exclusive statutory rights. See the landmark Canadian Supreme Court case of *CCH Canadian Ltd. v. Law Society of Upper Canada* [2004] 1 S.C.R. 339, 2004 SCC 13 on the issue as well as the analysis in Warren Chik, *Better a Sword than a Shield: The Case for Statutory Fair Dealing/Use Right as Opposed to a Defense in the Light of the Disenfranchising Effect of Digital Rights Management and Anti-Circumvention Laws*, *International Journal of Private Law*, 2008 Vol. 1 Nos. 1/2, 157.

instruments and the fact that it may be unnecessary and too disproportionately strong a response to these problems.⁷⁴ Perhaps specific exemptions at the safe harbor stage or even under copyright law, which currently contains some specific exemptions, such as the library exemption, for some of the functions like the indexing function, can be a more modest but effective alternative to dealing with the current problems.

2. To elevate fair use as a legal right.⁷⁵ Generally arguing for fair use as a right rather than merely a defense, and thus *prima facie* legal unless proven otherwise. This will justify Google proceeding with its initiatives even while litigation is still ongoing and the law remains ambiguous.⁷⁶ However, this is not so much a long-term solution as it is a justification for Google's presumptive practices before the issues and the legitimacy of the practice are legally resolved, which still require examination under the fair use test.

Moderate solutions are however probably more realistic and acceptable, and can resolve most of the disputes. These involve various degrees of overhaul to the safe harbor and fair use provisions to sufficiently accommodate Google's practices without undue over-extension of protection at the expense of copyright protections. They include:

1. Extending safe harbors and creating new exemptions with conditions.⁷⁷ This will establish certain duties for search engines while allowing them to continue their functions that benefit society as a whole and generally optimizing

⁷⁶ According to C.T. Drechsler, *Annotation, Extent of Doctrine of “Fair Use” Under Federal Copyright Act*, 23 A.L.R. 3d 139, §3c (2004), some courts regarded fair use as “not an infringement at all”. But it has been generally regarded as an exception to infringement with the burden of proof on the defendant. See e.g., *Video Pipeline, Inc. v. Buena Vista Home Entm't, Inc.*, 342 F.3d 191, 197 (3d Cir. 2003); *Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 107 (2d Cir. 1998); *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 590 (1994) and *Am. Geophysical Union v. Texaco, Inc.*, 60 F.3d 913, 918 (2d Cir. 1994), which states that the defendant bears the burden of proving fair use in order to avoid the consequences of copyright infringement. See also, *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 561 (1985) and *Dr. Seuss Enters. v. Penguin Books USA, Inc.*, 109 F.3d 1394, 1403 (9th Cir. 1997).

⁷⁷ E.g. Alison R. Watkins, *Note, Surgical Safe Harbors: The Family Movie Act and the Future of Fair Use Legislation*, 21 Berkeley Tech. L.J. 241 (2006). The Family Movie Act is an example of statutory safe harbor for digital indexing projects, relating to the creation and sale of filtering technology based on the function or action of technology rather than on a specific entity. Similarly, a digital library safe harbor could permit any company or organization, commercial or otherwise, that meets its criterion. A digital library safe harbor can be based on the creation of an intermediate copy of full text digital content and the use of internet search engine technology to access and search the intermediate copy (as long as only snippets or small and reasonable amounts of text are displayed sufficient for the purpose of search and identification of works and details or information such as author's name and book title in order to help in the further research and location of works); with the pre-condition that the full copy of a copyright protected work is not distributed and reasonable steps are taken to secure the full text digital content. Security conditions for eligibility to statutory protection can also be further spelled out to prevent damaging ‘leaks’ of information from occurring.

public and private interests based on principles of utilitarianism. The same policy arguments that paved the way for specific exemptions in favor of technology enabling the Internet and WWW to function can be extended to the usefulness of indexing, cataloging and other functions that a 'gateway to the WWW' provides.⁷⁸

2. Utilizing and developing the fair use factors to encompass good practices relating to useful search engine functions. In the meantime, also using methods and technologies to maximize usage while minimizing the likelihood of infringement under the existing copyright system, and basically working within the copyright system and taking advantage of existing immunities, exemptions and exceptions; and where these do not exist, use contractual agreements to tailor specific deals with rights holders.

4.3. *The proposed approach to law reform*

The information locator tools safe harbor provision should be updated to take into account the operational needs of new types of search engines.⁷⁹ In its current form, it does not provide protection from a copyright infringement action even for practices that are meant to facilitate search engine functionality. The safe harbor provision mainly shields all Internet intermediaries, including search engines and content hosts, from responsibility for third party materials. It is perhaps time to include some safety berths from primary infringement actions for acts and practices that are integral to the effective and efficient functions of the various intermediaries, particularly search engines, even if it involves their own actions and activities relating to copyrighted works. After all, the main objective of the safe harbor provisions is to preserve the essential functions of Internet intermediaries with a view to safeguarding the gatekeepers of the WWW. This is better than leaving it to litigation and a fair use analysis that may not conclusively resolve disputes or harmonize the legal position on the issues.

Alternatively or additionally, new or updated fair use factors, such as the codification of common law doctrines and supplementary tests, can provide much needed guidelines and coherence in the fair use analysis by the courts. This will hopefully produce more consistent decisions and outcomes in the future. This is useful particularly if the extension of safe harbor is considered too drastic a reform. Hence, the

alternative can be to extend the same protection in the form of a specific fair use defense rather than as a right to immunity, or at the very least, the same considerations, if not provisions, can be legislated as additional fair use factors to meet their immediate needs.

This is not to say that all search engine practices are necessary or legitimate. Thus, for instance, the separate browser for full images outside of the context of the webpage wherein it also appears, and which necessitates an additional 'step' in the click-on process for users, may not be a suitable candidate for any form of statutory protection or exemption. There is a distinction between "want" and "need" in each of these issues that may not be easy to draw, hence the need to constantly revisit and recalibrate public policy and private interests on the matter.

Before the actual proposals are made, there are some important things that should be kept in mind when considering legislative amendments to deal with the problems highlighted in this paper:

1. First, copyright law is one of the most amended legislation because it does not involve absolute rights or wrongs (unlike other areas of law such as criminal law) but rather a balance of rights between more than one stakeholder in creative works. Thus, it requires recalibration as contexts change, and there is no greater change to the treatment and attitudes toward creative works than the digitization of its form and electronic delivery.⁸⁰
2. Second, although it was initially about lack of control and Internet intermediaries dealing with third party materials, there is no reason why protections and exemptions cannot, given the changes and progress made in recent years, be considered for extension even to narrow situations where they deal with copyrighted works as the primary or first party, which may be justifiable based on private rights balancing and the public and social benefits of their functions.
3. Third, as noted, there are several ways that these changes can come about, such as through additional, amended or expanded statutory safe harbors; new specific fair use provisions such as those that we have seen relating to caching and digital back-ups, or expanded fair use provisions (e.g. the library archiving exemption can be amended to extend to non-library archives) and expanded fair use factors consisting of new and codified tests and considerations.⁸¹
4. Fourth, the spirit and purpose of copyright law should not be overlooked in favor of the form and technicality of the technology. Whilst copyright law should adapt to deal with technology, it should remain technology neutral in

⁷⁸ E.g., extending the statutory 'caching' exemption for copying to improve the accuracy and usefulness of the search function. See, Jesse S. Bennett, *Caching In on the Google Books Library Project: A Novel Approach to the Fair Use Defense and the DMCA Caching Safe Harbors*, 35 Fla. St. U.L. Rev. 1003, 1034–7 (Summer 2008). As noted, 17 U.S.C. §512(b) of the DMCA provides a safe harbor for system caching as long as the content is intermediate and temporary; made available by another; requested by a third person and stored through an automatic technical process. Google's caching of taken-down website content should also be addressed in such a provision.

⁷⁹ Brandon Brown, *Fortifying the Safe Harbors: Reevaluating the DMCA in a Web 2.0 World*, 23 Berkeley Tech. L.J. 437 (2008) and Joris van Hoboken, *Legal Space for Innovative Ordering: On the Need to Update Selection Intermediary Liability in the EU*, *Int'l J. Comm. L. & Pol'y* 49 (Winter 2009).

⁸⁰ E.g., the amendments under the DMCA dealing with many aspects of information technology, some of which are accommodating including provisions exempting system and user caching under the safe harbor provisions; while other amendments serve to manage or control digital forms of works such as the Digital Rights Management provisions.

⁸¹ Consultations should be made, which is expected as part of the legislative process, and Notes from Parliamentary Debates and Preparatory or Explanatory Notes should also be available for reference to provide clarity and guidance of the application and coverage of the new and amended provisions.

Table 3 – Template for a safe harbor or statutory exemption provision for the indexing function.

Indexing of Information

A service provider shall not be liable for the modification and display of information in a directory, catalog or index for the purpose of organizing information, and shall also not be liable for providing the technical means to transport a user to its source, whether or not as an information locator tool in relation to search results, for the purpose of making more efficient the function of indexing the information, on condition that the provider, upon receiving a removal request, acts expeditiously to remove the copy of the information.⁸²

application particularly given the rapidity of technological progress.

5. Fifth, if there are more streamlined or concise solutions to deal with several problems, then that approach should be taken. For example, the use of website descriptions, reduced-sized images and even news snippets can collectively be addressed by a single safe harbor provision or fair use exemption, or by several subject matter neutral fair use factors.

4.4. New safe harbor provisions or specific fair use exemptions for search engine indexing tools

Indexing is identified here as a main function with significant social benefits that outweigh the protectionist interests of copyright holders and for which statutory protections or exemptions should be extended. The indexing-related functions are practices that are necessary for the catalog and search functions that provide ordering of WWW content that is essential to its public utility. It will cover the adaptation of works and its display that will be considered necessary for such purposes, irrespective of the form or type of work, and will cover the thumbnail of image icons, screen capturing of video content, sampling of music content and the provision of webpage content headings and description. This function will specifically protect Internet search engines and other indexers (e.g. Intranet search services). The modifications made for indexing and presentation purposes should avoid mere duplication (unlike the display of full-sized images or a full text, or the streaming of an entire song).

This amendment, together with the existing safe harbor provisions, will effectively permit and legitimize the following activities or functions currently practiced by Google (and the same or similar functions of other online entities) specifically in relation to its images search engine and video search engine⁸³ –

- a. Thumbnails (reduced-sized versions) of images for the purpose of facilitating search results presentation (first party adaptation and display).
- b. Screen captures (reduced-sized still versions) of videos and content descriptions for the purpose of facilitating efficient search results presentation (first party adaptation and display).
- c. Providing hyperlinks (including deep links) to third party websites that may contain illegal images (third party material).

4.4.1. Instituting a “removal request process” in addition to the notice process for protected activities not relating to third party material

It is to be noted that these amendments effectively recognize and legitimize a very important carve-out of the copyright framework, which is the ‘opt-out’ practice currently taken by Google. In order to ensure a fair balance of rights and interests between the parties, meet the preferences of copyright owners and offset the effects of the limited opt-out exemptions that can result from the above reforms, a simple streamlined process to ‘opt-out’ from inclusion to its programs, known as the “removal request process” with the onus on the copyright owner, should be provided. This resembles and functions in a similar manner to the notice process or regime and is a concession or compromise for the statutorily sanctioned incursion of rights. It will be a companion process to the current “notice regime” (i.e. the statutory notice-and-take-down process). The “removal request regime” relates to Google’s direct use of copyrighted materials, and what would otherwise (if not for the safe harbor or exemption) be primary infringement in its part, while the notice process relates to third party material, and the possibility of secondary infringement by Google. The format and procedure for this removal request process can resemble the notice process (but without the put-back procedure) and may be simplified and automated, as they are likely to be non-contentious. If it is to be put into place, then it has to be made a pre-condition for eligibility to statutory protection (i.e. safe harbor or specific exemption under the Copyright Act).⁸⁴

The extension of a similar procedure for request removal extends the notice process beyond illegal content uploaded by third parties to legal content uploaded by Google (in relation to GIS and GBS) as permitted under statute but that is subject to the paramount right of the copyright holder to actively assert his exclusive rights. Thus, the failure to provide a streamlined process for request removal and to respond expeditiously to such requests will remove the intermediary from its protection. This reinforces the narrow acceptance of an opt-out process that is in effect a reversal of the copyright default rights.

⁸² However, other existing conditions for eligibility will have to be excluded for obvious reasons such as the requirement of an effective policy to deal with instances of repeat infringement (by another) and the support of standard technical measures for the protection of works (except insofar as Google itself does not circumvent such measures). See, 17 U.S.C. §512(i).

⁸³ Insofar as its model of presentation is concerned, it is similarly addressed by the proposed amendments in relation to indexing and display.

⁸⁴ See Table 3. If amendment to the fair use factor approach is preferred as the alternative to this higher form of protection, then the intermediary’s own practices in relation to complaints and requests for removal can be relevant and given due weight, such as in relation to the factors of good faith and counter-measures.

4.5. Updated fair use factors under the general fair use exception provision⁸⁵

The mildest option for legal reform is to add to the list of fair use factors in the general fair use provision, which includes both a codification of additional tests or factors developed by the courts in common law jurisdictions as well as proposed additional new factors in the list of fair use factors for judicial analysis. Although this list is non-exhaustive, explicitly written factors often carry greater weight and more attention than extraneous ones. Moreover, they *require* the judge to apply them if applicable unlike additional unstated factors.⁸⁶ Another useful approach is to expound on existing factors for the digital context.

The following is an expanded list of fair use factors and the elucidation of existing factors specifically relevant to the online context that can be considered with the bases or reasons for the proposed amendment:⁸⁷

1. The inclusion of a fair use consideration to the first fair use factor for when a use is transformative in nature and is non-consumptive. This acknowledges the relevance of alternative or incidental uses of works beyond the original intended use that has benefits to society, and where the use does not rely on or focus primarily on the creative aspect of the work. This is an expansion of the first fair use factor on “the purpose and character of the dealing”. In fact, the manner of the use and the format of the work and the unauthorized use can significantly change the original “nature of the work or adaptation”.
2. The second fair use factor on “the amount and substantiality of the part copied” should be clarified. “Substantiality” have traditionally and largely referred to the quality and quantity of the part used. However, it should also be made clear that it includes format, size, resolution, color and so on. The application of copy-protect security devices such as watermarks should also be taken into consideration. The reference to the amount copied “taken in relation to the whole work or adaptation use in relation to the whole work

⁸⁵ The inclusion of new fair use factors is not common but it has been done. For example, Singapore’s Copyright Act (Cap. 63) includes a fifth factor to the usual four factors in section 35(2)(e): “The possibility of obtaining the work or adaptation within a reasonable time at an ordinary commercial price.” This factor focuses on society’s interest in the availability of, and access to, works. ‘New’ fair use analyses can bring into focus more public and social good or interests and other private interests such as technological interests rather than as it currently exists which appears mainly through the lens and perspective of the rights holder.

⁸⁶ The only drawback is that these additional factors may be too fact specific and may be redundant in the analysis in relation to other non-intermediary usage, giving rise to a large number of neutral or inapplicable results in the legal application process.

⁸⁷ As noted, the existing factors may already be adequate to address some of the disputes and concerns involves in these new technology and services such as the display of snippets of information (*contra*. display of reduced-sized images, which is a relatively newer practice) which does not differ much from the issues of fair use that predates the digital age (except insofar as the factual considerations can change the application, applicability, weightage and overall assessment of the factors).

or adaptation” should thus not qualify or limit the earlier reference to substantiality.⁸⁸

3. The use has consequential or incidental benefits that offset or outweighs the detriment to the copyright owner. For example, information locator tools benefit copyright holders through referrals (i.e. linking to actual websites) leading to traffic to and interest in their website and the works contained therein, as they serve as a directory and provides free advertisement and publicity.⁸⁹ This relates to the fourth fair use factor on “the effect of the dealing upon the potential market for, or value of, the work or adaptation” and highlights the fact that the unauthorized use can on the whole benefit rather than disadvantage the market in a type of work as determined by a financial impact assessment.
4. A *Counter-Measure* factor, which takes into account reasonable technological, such as filtering, screening and identifying technologies, and non-technological methods to counteract or prevent detriment to and abuse of rights will be relevant and useful, particularly in an increasingly technology-driven digitized and networked environment.⁹⁰ For example, the use of watermarking and other forms of preventative technology will be relevant and favorable to the user.⁹¹ In fact, courts in various jurisdictions have occasionally made reference to the state of technology and

⁸⁸ However, this latter portion is still relevant. For instance, the use of a work relative to other components of a re-use within its context is still relevant in some cases, for example the use of a song in an original YouTube video where the images and choreography are original. Also, in the digital context, substantiality is also relevant in assessing the likelihood or risk and the volume or level of *consequential* infringement (i.e. a ‘domino effect’ or escalation of infringement) to be expected in order to determine if it is an acceptable level when compared to the benefits of the service, which creates those conditions. This illustrates the effects of optimization and of utilitarianism at work as the benefits and detriment may relate to different parties, but if the benefits outweigh the detriment *as a whole* then the practice concerned is more acceptable.

⁸⁹ Traditionally fair use relate to actions that are mainly detrimental to the copyright holder’s interests, but the irony is that in modern technology there are many objectionable practices that actually do also have benefits for rights holders, and these have been taken into account in cases whether in the context of an existing factor (thus diluting its weightage, impact or importance), as an additional non-enunciated factor to consider and add to the equation, in the form or as part of a ‘new’ doctrine to supplement an existing factor like the transformative use doctrine or as a general observation. This is an important factor for a fairness analysis, but this time, also taking into account the defendant’s perspective.

⁹⁰ It can be noted that this bears some relation to the requirement to accommodate and not interfere with standard technical measures for the protection of works, which is currently a prerequisite for safe harbor eligibility. See, 17 U.S.C. §512(i)(B). However, in this instance, it relates to Google’s own practices to safeguard the interests of rights holders with regards to their copyrighted works in the course of its own use of those works.

⁹¹ For the archiving exemption in particular, which will be recommended in Part Two, adequate safeguards against highly damaging effects of ‘leaks’, which can open the floodgates of third party infringement, will obviously be an important consideration here, and even the display of works can be copy-protected as a form of digital Technological Rights Management (TRM).

Table 4 – Example of proposed amendments to the U.S. fair use provision.

The fair use of a copyrighted work is not an infringement of a copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include [but are not limited to]:

1. the purpose and character of the use, including whether such use is of a commercial nature or is for non-profit educational purposes *and whether such use is of a transformative nature or is for a consumptive purpose*;
2. the nature of the copyrighted work and the nature of the use, including personal use;
3. the amount and substantiality –
 - a. of the portion, *including its used in relation to the copyrighted work as a whole and substantiality includes format, size, resolution and other features of use that distinguishes it from the original work*;
 - b. of infringing uses as compared to non-infringing [in relation to the services of a technological medium or media for communication and transfer];
4. the effect of the use upon the potential market for or value of the copyrighted work; *and*
5. the copyrighted work was used in good faith and reasonable and proportionate measures have been taken to protect the copyrighted work from infringement.

the use of counter-technology to prevent, limit or eliminate infringement, for example, the High Court in the Australian *Kazaa* case.⁹² The courts have also looked at the motives and actions of the Internet intermediary, with the US Supreme Court in the *Grokster* case referring to a “non-inducement” doctrine.⁹³ Thus, increasingly, the “fairness” of the use relates not only to the technicality of use but also the intentions and behavior or practices of the user. This was also the point raised in by the Ninth Circuit in the *Perfect 10* case, although it would be useful if there is greater elucidation on the reasonableness test and factors determining reasonableness (e.g. the state of technology, market availability, cost and effort, likelihood and percentage of success, etc.) and proportionality of response, which is perhaps a task that will have to be left to the courts. Also, non-technological measures like warnings and undertaking requirements, profit-sharing, compensation and private arrangements, research funding, a robust notice process and removal request process, and other measures may also be relevant for this and for the good faith factor, below.

5. A Good Faith factor analyzing the motive and intention of the use and the behavior and practices of the user and facilitator. For example, unfair competition and misappropriation of works and the lack of any good faith or legitimate interest in a use or service will be taken against the perpetrator; while attempts to limit or prohibit copyright infringement through the development of technological and non-technological methods, warning of and non-inducement of *consequential* infringement shows good faith and will be favorable for the facilitator.⁹⁴ In assessing good faith or the lack thereof, at least in relation to the facilitator,

the actions of the corporate entity should be relevant instead of the individual actions of its employees (i.e. a sort of “corporate veil” should extend to such a situation); hence the test should be an objective one.⁹⁵

6. A *Personal Use* factor, to allow for personal and non-commercial uses such as the creation of digital duplicates, in certain cases reformatting them, in order to play it on other devices and the creation of back-up copies of a program or information in the event that the original copy is accidentally destroyed or lost. The making of a back-up of computer programs is already a popular exception to infringement. This factor is primarily relevant for the individual user.

All these factors can be incorporated into the current provision with some amendments in the following manner as proposed in Table 4.

I believe that this additional and expounded list of factor, which provides more detailed, important and relevant new considerations, will guide or steer the courts to reach the same or similar results as the recommended changes to safe harbor or specific exemption provisions. These factors have also been stated in a general manner so that it remains technology neutral and can be also be applicable to future types of uses other than those examined in this paper. For instance, the “transformative use” test has been successfully used for different types of uses since its discovery. These amendments to the fair use factors will take into account the unique nature of the uses that Internet intermediaries put creative works to, taking into account their objectives and purposes, whereas the original factors were mainly focused on the user as primary infringer and as the primary subject for a fair use examination. Also, it must be noted that, unlike the safe harbor provisions, the fair use defense can also apply to a cause of action on secondary infringement; hence, the development of additional tests by the United States courts in the Sony *Betamax* to *Grokster* line of cases under common law and the proposed expansion have to take into account the services of Internet facilitators through the interpretation of existing factors and the addition of new ones.

⁹² *Universal Music Australia Pty. Ltd. v. Sharman License Holdings Ltd.*, [2005] FCA 1242.

⁹³ *MGM Studios, Inc. v. Grokster, Ltd.* 545 U.S. 913 (2005).

⁹⁴ The notion of good faith have either been explicitly taken into consideration in the judge’s decision making on safe harbor and fair use (see, e.g. *Io Group Inc. v. Veoh Networks Inc.*, No. C06-03926 HRL, U.S. District Court, Northern District of California, San Jose Division), or are implicit in their assessment of the intermediary’s actions. It is also implicit in the notions of fairness under the fair use doctrine, and in the pre-requisites for safe harbor protection (i.e. lack of knowledge, no control or direct financial gain) and even its threshold requirements to prevent repeat infringers and institute technical measures.

⁹⁵ See judge Louis L. Stanton’s opinion, which influenced his decision, in *Viacom International, Inc. v. YouTube, Inc.*, No. 07 Civ. 2103 (SDNY, 2010), which involved a plethora of evidence on incriminating communications on both sides of the dispute.

Legal reform need not be confined to one alternative or another and can be a mixture depending on which exemption or limitation is more important and hence deserving of legal instruments offering stronger and earlier forms of protection, and which practices justify lesser forms of protection or only require statutory clarification. Whichever the preferred approach to legal reform, the status granted by immunity and the importance and priority given to the expressed list of factors makes any changes to them highly important and impactful on future decisions on the issues.

4.6. Practices determined to be unjustified and not eligible for protection

Although the suggested reforms made above are favorable to Google there are some current practices and actions that should not be eligible for protection, and hence the industry-wide practices or abuses relating to these practices should cease, unless private arrangements or settlement agreements are made that does not go against public policy interests. For Google Images Search Engines (GIS), it includes framing of the webpage that contains the image and providing a holding page after the selection of an image by a user providing the

option of inline linking to only the full image in a separate browser windows out of context of the image in the webpage.⁹⁶ Technically, the material is not copied, but in reality it has the same detrimental effects of being copied.⁹⁷ Fair use is inapplicable here.

5. Conclusion

The importance of socio-economic activities on the Internet for work, play and study in the future cannot be understated and the role of the Internet intermediary such as the search engine is integral and have to be largely protected but in a manner that is as fair to rights holders of creative works as possible. It is hoped that the evaluation conducted in this article will put the issues and matters relating to search engine functionality into perspective, that the proposals will be useful and seriously considered and that it will generate continued discussion with a view to more concrete solutions for all parties concerned.

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⁹⁶ Thus preferring the spirit of the “incorporation test” over the technicality of the “server test”.

⁹⁷ Although the “server test” would determine that there was technically no copying, the objective of the exclusive right of duplication should be instructive as the deleterious effects on the rights holders would be the same. Moreover, there is also the display right, which have also been infringed by such practices.